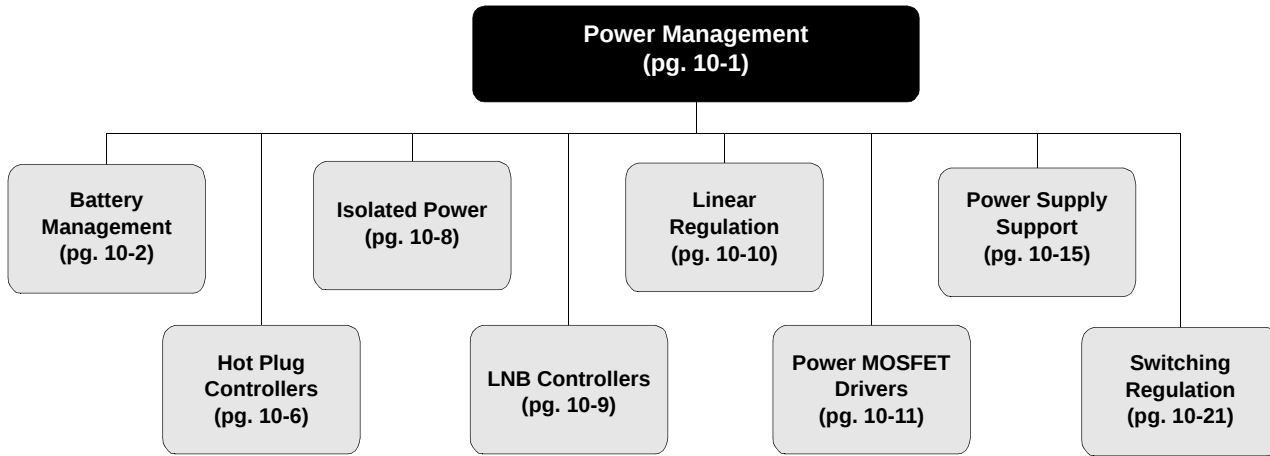




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Battery Management

Cell Balancing and Safety

Device	# of Series Connected Li-Ion Cells	Power FET Control	Shutdown				Programmable Threshold	Programmable Timeout	Cell Voltage Monitor	Pack Current Monitor	Cell Balancing FETs	Voltage Regulator (V)	Interface	Package
			Over-voltage	Under-voltage	Over-current	Short Circuit								
ISL9208	4 to 7	Y	Y	Y	Discharge + Charge	Discharge	4-Discharge OC, 4-Charge OC, 4-Short Circuit	8-Discharge OC, 8-Charge OC, 2-Short Circuit	Y	N	Y	3.3	I ² C	Eval Board, 32 Ld QFN
ISL9216	5	Y	Y	Y	Discharge + Charge	Discharge	4-Discharge OC, 4-Charge OC, 4-Short Circuit	8-Discharge OC, 8-Charge OC, 2-Short Circuit	Y	N	Y	3.3	I ² C	Eval Board, 32 Ld QFN
ISL9217	4 to 7	N	Y	Y	N	N	N	N	Y	N	Y	3.3	I ² C	24 Ld QFN
ISL94200	4 to 7	Y	Y	Y	Discharge + Charge	Discharge	4-Discharge OC, 4-Charge OC, 4-Short Circuit	8-Discharge OC, 8-Charge OC, 2-Short Circuit	Y	Y	N	3.3	I ² C	24 Ld QFN
ISL94201	4 to 7	N	Y	Y	N	N	N	N	Y	N	N	3.3	I ² C	24 Ld QFN

Battery Status Monitors and Backup Switches

Device	# of Li-Ion Cells Protected	System Management: System Resets, Power Indicators, Fault Detection	Over-Charge Protection	V _{IN} (min) (V)	V _{IN} (max) (V)	I _S (max) (A)	I _{OUT} (max) (mA)	Input Trip (mV)	Package
ICL7673	N/A	Yes	Yes	2.5	15	5	38	50	8 Ld PDIP, 8 Ld SOIC

Charge System Safety

Device	Programmable Overcurrent (A)	Input Overvoltage Protection (V)	Battery Overvoltage Protection (V)	Battery Leakage	R _{ON} @ 500mA (mΩ)	Package
ISL9200	0 to 1	6.8 typ, 6.65 min, 7.0 max	4.4 typ, 4.325 min, 4.475 max	20nA max @ 4.4VVB	250 typ, 450 max	12 Ld QFN
ISL9209	0 to 1	5.58 typ, 5.65 min, 6.0 max	4.4 typ, 4.325 min, 4.475 max	20nA max @ 4.4VVB	250 typ, 450 max	12 Ld DFN
ISL9209B	0 to 1.5	5.58 typ, 5.65 min, 6.0 max	4.34 typ, 4.28 min, 4.4 max	20nA max @ 4.34VVB	250 typ, 450 max	12 Ld TDFN
ISL9209C	0 to 1.5	5.58 typ, 5.65 min, 6.0 max	4.34 typ, 4.28 min, 4.4 max	20nA max @ 4.4VVB	170 typ, 280 max	12 Ld TDFN
ISL9211	0 to 1.5	5.8 typ, 5.6 min, 6.0 max	4.34 typ, 4.25 min, 4.4 max	20nA max @ 4.4VVB	170 typ, 280 max	8 Ld TDFN T+R
ISL9212	0 to 2	6.8 typ, 6.65 min, 7.0 max	4.4 typ, 4.325 min, 4.475 max	20nA max @ 4.4VVB	170 typ, 280 max	12 Ld DFN
ISL9212A	0 to 2	6.8 typ, 6.65 min, 7.0 max	4.4 typ, 4.325 min, 4.475 max	20nA max @ 4.4VVB	170 typ, 280 max	12 Ld DFN
ISL9212B	0 to 2	6.8 typ, 6.65 min, 7.0 max	4.4 typ, 4.325 min, 4.475 max	20nA max @ 4.4VVB	170 typ, 280 max	12 Ld DFN

Fuel Gauges

Device	V _S (V)	Operating Temp. Range (°C)	Supply Current Sleep (nA)	Supply Current Run (μA)	A/D Measurement	Comments	Package
ISL6295	2.8 to 7	-20 to 85	400	85	15 Bits + Sign	256 Bytes of EEPROM, Temp measurement	8 Ld TSSOP

Multiple Cell Li+/Polymer Battery Charger

Input Voltage Range: 7V to 25V, Topology: Fixed Frequency Synchronous Buck, Audible Noise: No, Operating Temperature Range: -10°C to 100°C, Thermal Shutdown: +150°C

Device	iSim	Input Current Limit Accuracy (%)	Battery Charge Voltage (V)	Charging Voltage Accuracy (max) (%)	Battery Charge Voltage Adjust (%)	Charge Current Limit Accuracy (%)	Trickle Charge Current Limit Accuracy (%)	Automatic Trickle Charge (typ) (V)	Battery Leakage Current (max) (μA)	Automatic Power Source Selection	DC Adapter Detection	Switching Freq. (typ) (kHz)	Max Duty Cycle (%)	Package
ISL6251	Y	±3	4.2/Cell (2S, 3S, 4S)	±0.5	±5/Cell	±5 (CHLIM=2.0V)	±50 (CHLIM=0.2V)	No (Set by Host)	10 (DCIN=0V, No System Load)	No	No	300	99.9	24 Ld QSOP, 28 Ld QFN
ISL6251A	Y	±3	4.2/Cell (2S, 3S, 4S)	±0.5	±5/Cell	±3 (CHLIM=2.0V)	±25 (CHLIM=0.2V)	No (Set by Host)	10 (DCIN=0V, No System Load)	No	No	300	99.9	24 Ld QSOP, 28 Ld QFN
ISL6252		±3	4.2/Cell (2S, 3S, 4S)	±0.5	±5/Cell	±3 (CHLIM=2.0V)	±25 (CHLIM=0.2V)	No (Set by Host)	10 (DCIN=0V, No System Load)	No	No	300	99.6	24 Ld QSOP, 28 Ld QFN
ISL6252A		±3	4.2/Cell (2S, 3S, 4S)	±0.5	±5/Cell	±3 (CHLIM=2.0V)	±25 (CHLIM=0.2V)	No (Set by Host)	10 (DCIN=0V, No System Load)	No	No	300	99.6	24 Ld QSOP, 28 Ld QFN
ISL6256		±3	4.2/Cell (2S, 3S, 4S)	±0.5	±5/Cell	±3 (CHLIM=2.0V)	±25 (CHLIM=0.2V)	No (Set by Host)	10 (DCIN=0V, No System Load)	Yes	Yes	300	99.6	28 Ld QFN, 28 Ld QSOP
ISL6256A		±3	4.2/Cell (2S, 3S, 4S)	±0.5	±5/Cell	±3 (CHLIM=2.0V)	±25 (CHLIM=0.2V)	No (Set by Host)	10 (DCIN=0V, No System Load)	Yes	Yes	300	99.6	28 Ld QFN, 28 Ld QSOP
ISL6253		±3	4.2/Cell (2S, 3S, 4S)	±0.6	±5/Cell	±3 (CHLIM=3.3V)	±35 (CHLIM=3.3V)	Yes (3.1/Cell)	10 (DCIN=0V, No System Load)	Yes	Yes	300	99.9	28 Ld QFN, 28 Ld QSOP
ISL6255	Y	±3	4.2/Cell (2S, 3S, 4S)	±0.5	±5/Cell	±5 (CHLIM=2.0V)	±50 (CHLIM=0.2V)	No (Set by Host)	10 (DCIN=0V, No System Load)	Yes	Yes	300	99.9	28 Ld QFN, 28 Ld QSOP
ISL6255A	Y	±3	4.2/Cell (2S, 3S, 4S)	±0.5	±5/Cell	±3 (CHLIM=2.0V)	±25 (CHLIM=0.2V)	No (Set by Host)	10 (DCIN=0V, No System Load)	Yes	Yes	300	99.9	28 Ld QFN, 28 Ld QSOP
ISL6257		±1.5	4.2/Cell (2S, 3S, 4S)	±0.5	±5/Cell	±1.5 (CHLIM=2.0V)	±25 (CHLIM=0.2V)	No (Set by Host)	10 (DCIN=0V, No System Load)	No (Set by Host)	Yes	300	99.9	28 Ld QFN
ISL6258		±3	6.144 to 19.2 in 16mV Steps	±0.5	16mV Steps	±3	128mA to 384mA	Yes (Threshold Set by User)	25 (DCIN=0V, No System Load)	Yes	No	400	99.9	28 Ld TQFN

Multiple Cell Li+/Polymer Battery Charger (Continued)

Input Voltage Range: 7V to 25V, Topology: Fixed Frequency Synchronous Buck, Audible Noise: No, Operating Temperature Range: -10°C to 100°C, Thermal Shutdown: +150°C

Device	iSim	Input Current Limit Accuracy (%)	Battery Charge Voltage (V)	Charging Voltage Accuracy (max) (%)	Battery Charge Voltage Adjust (%)	Charge Current Limit Accuracy (%)	Trickle Charge Current Limit Accuracy (%)	Automatic Trickle Charge (typ) (V)	Battery Leakage Current (max) (μA)	Automatic Power Source Selection	DC Adapter Detection	Switching Freq. (typ) (kHz)	Max Duty Cycle (%)	Package
ISL6258A		±3	6.144 to 19.2 in 16mV Steps	±0.5	16mV Steps	±3	128mA to 384mA	Yes (Threshold Set by User)	25 (DCIN=0V, No System Load)	Yes	No	400	99.9	28 Ld TQFN
ISL88731		±3	2.7 to 19.2 in 16mV Steps	±0.5	16mV steps	±3	64mA to 220mA	2.7	2 (DCIN=0V, No System Load)	No (Set by Host)	No (Set by Host)	400	99.9	28 Ld QFN

Single Cell Li+/Polymer Battery Chargers

Device	iSim	V _{OUT} (typ) (V)	Voltage Accuracy (%)	V _{IN1} (max) (V)	V _{IN2} (max) (V)	I _{OUT1} (max) (A)	I _{OUT2} (max) (A)	Safety Timer	Self Termination	Accepts CC Adapter	V _{IN1} Trickle Charge (min) (% CC)	V _{IN2} Trickle Charge (min) (% CC)	Thermal Regulation	Functions (Pin)	Package
ISL6291		4.1, 4.2	1	13.5	N/A	2	N/A	Y	Y	N	10	N/A	Y	Enable, Charge Status, Fault Indiction, NTC Input, Timeout Disable, Programmable I _{MIN}	16 Ld QFN
ISL6292	Y	4.1, 4.2	1	7	N/A	1.6 (DFN) 2.1 (QFN)	N/A	Y	Y	Y	10	N/A	Y	Enable, Charge Status, Fault Indiction, NTC Input, Timeout Disable, Programmable I _{MIN} , Reference Voltage	10 Ld DFN, 16 Ld QFN
ISL6292B		4.2	1	7	N/A		N/A	Y	Y	Y		N/A	Y		16 Ld QFN
ISL6292C		4.2	1	7	N/A	1.6	N/A	Y	Y	Y	10	N/A	Y	Enable, Charge Status, Fault Indiction, Reference Voltage	10 Ld DFN
ISL6292D		4.2	1	7	N/A	2.1	N/A	Y	Y	Y	10	N/A	Y	Enable, Charge Status, Fault Indiction, NTC Input, Timeout Disable, Programmable I _{MIN} , Reference Voltage	16 Ld QFN
ISL6293		4.2	1	28	5.5	1	0.5	N	N	N	9.2	8	Y	Enable, Charge Status	10 Ld DFN
ISL6294		4.2	1	28	N/A	0.9	N/A	N	N	N	15	N/A	Y	Enable, Charge Status, Programmable I _{MIN}	8 Ld DFN T+R, 8 Ld SOIC
ISL6297		4.2	0.7	7	N/A	1.5	N/A	Y	Y	Y	10	N/A	Y	Enable	16 Ld QFN
ISL6298		4.1, 4.2	1	7	N/A	0.45	N/A	Y	Y	Y	20	N/A	Y	Enable, Charge Status, Fault Indiction, NTC Input, Timeout Disable, Programmable I _{MIN} , Reference Voltage	10 Ld DFN, 16 Ld QFN
ISL6299A		4.2	1	28	7	1	0.38	N	N	N	11	12	Y	Enable, Charge Status, Programmable I _{MIN}	10 Ld DFN
ISL9203R5220		4.2	1	7	N/A	1.6	N/A	N	N	Y	10	N/A	Y	Enable, Charge Status, Reference Voltage	10 Ld DFN

Single Cell Li+/Polymer Battery Chargers (Continued)

Device	iSim	V _{OUT} (typ) (V)	Voltage Accuracy (%)	V _{IN1} (max) (V)	V _{IN2} (max) (V)	I _{OUT1} (max) (A)	I _{OUT2} (max) (A)	Safety Timer	Self Term- ination	Accepts CC Adapter	V _{IN1} Trickle Charge (min) (% CC)	V _{IN2} Trickle Charge (min) (% CC)	Thermal Regulation	Functions (Pin)	Package
ISL9204		4.2	1	30	N/A	0.35	N/A	N	N	N	19	N/A	Y	Enable, Charge Status, Power Presence Indication, Programmable I _{MIN}	8 Ld DFN
ISL9205		4.2	0.6	7	N/A	1	N/A	Y	Y	Y	10	N/A	Y	Enable, Timeout Disable, Charge Indication, Fault, NTC, I _{REF} Set, I _{MIN} Set, Time Set	16 Ld QFN
ISL9205A		4.2	0.6	7	N/A	1	N/A	N	N	Y	10	N/A	Y	Enable, Charge Indication, Fault, I _{REF} Set, I _{MIN} Set, Time Set	10 Ld DFN
ISL9205B		4.2	0.6	7	N/A	1	N/A	Y	Y	Y	10	N/A	Y	Enable, Charge Indication, Fault, I _{REF} Set, I _{MIN} Set, Time Set	10 Ld DFN
ISL9205C		4.256	0.6	7	N/A	1	N/A	Y	Y	Y	10	N/A	Y	Enable, Charge Indication, Fault, I _{REF} Set, I _{MIN} Set, Time Set	10 Ld DFN
ISL9205D		4.2	0.6	7	N/A	1	N/A	Y	Y	Y	10	N/A	Y	Enable, Charge Indication, Fault, NTC, I _{REF} Set, I _{MIN} Set, Time Set	10 Ld DFN
ISL9214		4.2	1	28	7	0.38	N/A	N	N	N	16	17	Y	Enable, Charge Status, Programmable I _{MIN} , Reference Voltage	10 Ld DFN
ISL9219		4.2	0.7	28	N/A	1.1	N/A	Y	Y	Y	10	N/A	Y	Enable, Trickle Mode Indication, Charge State Indication, Adapter Fault, PGOOD, ISET, NTC Input, Time Set	20 Ld QFN
ISL9219A		4.2	0.7	28	N/A	1.1	N/A	Y	Y	Y	10	N/A	Y	Enable, Trickle Mode Indication, Charge State Indication, Adapter Fault, PGOOD, ISET, NTC Input, Time Set	20 Ld QFN
ISL9221		4.2	1	28	5.4	1.2	0.465	N	Y	Y	18	N/A	Y	Enable, Charge Status, Power Present Indicator	12 Ld DFN
ISL9222		4.2	1	28	7	1	0.38	N	N	N	16	17	Y	Enable, Programmable I _{MIN} , Power Presence Indication, Auxiliary OR-gate For System Booting Logic	8 Ld TDFN
ISL9301		4.5	1	28	N/A	0.8	N/A	Y	Y	Y	6	N/A	Y	Power Presence, Charge Indication, Battery Disconnect, I _{REF} I _{MIN} Set, Time Set	10 Ld DFN

Authentication

Device	V _S (V)	Operating Temp. Range (°C)	Supply Current (μA)	Data Bus	Data Bus Speed (Kbps)	Comments	Package
ISL6296	2.6 to 4.8	-25 to +85	110	Single Wire	23	64-Bit Secret with 16x8 OTP ROM	5 Ld SOT-23 T+R, 8 Ld DFN T+R
ISL6296A	2.6 to 4.8	-25 to +85	38	Single Wire	23	64-Bit Secret with 16x8 OTP ROM	5 Ld SOT-23 T+R, 8 Ld TDFN T+R
ISL9206	2.6 to 4.8	-20 to +85	0.15 in Sleep Mode/110 in Run Mode	Single Wire	23	FlexiHash+	5 Ld SOT-23 T+R, 8 Ld DFN T+R
ISL9206A	2.6 to 4.8	-25 to +85	0.15 in Sleep Mode/38 in Run Mode	Single Wire	23	FlexiHash+	5 Ld SOT-23 T+R, 8 Ld TDFN T+R

Hot Plug Controllers

Single Channel

Internal FET

Device	V _{BIAS} (V)	Controlled Voltages (V)	Regulation or Latch-Off for Overcurrent	r _{DS(ON)} (mΩ)	UV/OV Feature	Reporting	Package
ISL6121	+2.5 to +5.5	+2.5 to +5.5	Current Regulation (2A)	50	UV Lockout	Fault-bar for OC Latch-Off	8 Ld SOIC

External FET

Device	System Management: System Resets, Power Indicators, Fault Detection	Adjustable Gate Ramp	Advanced Fault Protection	V _{BIAS} (V)	Controlled Voltages (V)	Regulation or Latch-Off for Overcurrent	Adjustable or Fixed OC V _{th}	Int/Ext FET	UV/OV Feature	Reporting	Package
ISL6115	Y	Y	Y	12	12	Current Regulation	Adjustable		UV Lockout	PGOOD + Fault Off	8 Ld SOIC
ISL6116	Y	Y	Y	12	5	Current Regulation	Adjustable		UV Lockout	PGOOD + Fault Off	8 Ld SOIC
ISL6117	Y	Y	Y	12	3.3	Current Regulation	Adjustable		UV Lockout	PGOOD + Fault Off	8 Ld SOIC
ISL6120	Y	Y	Y	12	2.5	Current Regulation	Adjustable		UV Lockout	PGOOD + Fault Off	8 Ld SOIC
ISL6140	Y	Y	N	-10 to -80	-10 to -80	Latch-Off	Fixed	Ext	UV/OV Lockout	PWRGD-bar	8 Ld SOIC
ISL6141	Y	Y	Y	-20 to -80	-20 to -80	Current Regulation	Fixed	Ext	UV/OV Lockout	PWRGD-bar	8 Ld SOIC
ISL6142	Y	Y	Y	-20 to -80	-20 to -80	Current Regulation	Fixed	Ext	UV/OV Lockout	PWRGD-bar	14 Ld SOIC
ISL6150	Y	Y	N	-10 to -80	-10 to -80	Latch-Off	Fixed	Ext	UV/OV Lockout	PWRGD	8 Ld SOIC
ISL6151	Y	Y	Y	-20 to -80	-20 to -80	Current Regulation	Fixed	Ext	UV/OV Lockout	PWRGD	8 Ld SOIC
ISL6152	Y	Y	Y	-20 to -80	-20 to -80	Current Regulation	Fixed	Ext	UV/OV Lockout	PWRGD	14 Ld SOIC

Dual Channel

Internal FET

Device	V _{BIAS} (V)	Controlled Voltages (V)	Regulation or Latch-Off for Overcurrent	r _{DS(ON)} (mΩ)	UV/OV Feature	Reporting	Package
ISL6119	+2.5 to +5.5	+2.5 to +5.5	Current Regulation (1A)	80	UV Lockout	FAULT-bar for OC	8 Ld SOIC
ISL6118	+2.5 to +5.5	+2.5 to +5.5	Current Regulation (0.6A)	80	UV Lockout	FAULT-bar for OC	8 Ld SOIC

External FET

Device	V _{BIAS} (V)	Controlled Voltages (V)	Current Regulation or Latch-Off for Overcurrent	Int/Ext FET	UV/OV Feature	Reporting	Package
HIP1012A	12	+12 and +5 or +5 and +3.3	Current Regulation	Ext	UV Notification	PGOOD for UV or OC	14 Ld SOIC
HIP1013	12	+12 and +5 or +5 and +3.3	Latch-Off	Ext	UV Notification	PGOOD for UV or OC	14 Ld SOIC
HIP1020	+12 or +5	≤Bias Voltage	N/A	Ext	N/A	N/A	5 Ld SOT-23 T+R
ISL6160	12	+12 and +5	Current Regulation	Ext for +12V, Int for +5V	UV Lockout	FAULT-bar for UV or OC	14 Ld SOIC
ISL6161	12	+12 and +3.3	Current Regulation	Ext	UV Notification	PGOOD for UV or OC	14 Ld SOIC
ISL6173	2.2 to 3.6	0.7 to 3.3	Current Regulation	Ext	UV	PGOOD and FAULT	28 Ld QFN

PCI

Single Slot

Device	V _{BIAS} (V)	Controlled Voltages (V)	Regulation or Latch-Off for Overcurrent	Int/Ext FET	UV/OV Feature	Reporting	SM Bus	Package
HIP1011	12	+12, -12, +5, +3.3	Latch-Off	Int and Ext	UV Lockout	UV and OC	N	16 Ld SOIC
HIP1011A	12	+12, -12, +5, +3.3	Latch-Off	Int and Ext	UV Lockout	UV and OC	N	16 Ld SOIC
HIP1011B	12	+12, -12, +5, +3.3	Latch-Off	Int and Ext	UV Lockout	OC	N	16 Ld SOIC
ISL6111	12	+12, -12, +5, +3.3	Current Regulation	Int and Ext	UV Lockout	PGOOD for OC	N	20 Ld QFN

Dual Slot

Device	V _{BIAS} (V)	Controlled Voltages (V)	Regulation or Latch-Off for Overcurrent	Int/Ext FET	UV/OV Feature	Reporting	SM Bus	Package
HIP1011D	12	+12, -12, +5, +3.3	Latch-Off	Int and Ext	UV Lockout	UV and OC	N	28 Ld SSOP
HIP1011E	12	+12, -12, +5, +3.3	Latch-Off	Int and Ext	UV Lockout	OC	N	28 Ld SSOP

PCI Express

Dual Slot

Device	V _{BIAS} (V)	Controlled Voltages (V)	Regulation or Latch-Off for Overcurrent	Int/Ext FET	UV/OV Feature	Reporting	SM Bus	Package
ISL6112	3.3	+12 and +3.3 and 3.3 Aux	Current Regulation	Int and Ext	UV Lockout	PGOOD for UV or OC	Y	48 Ld QFN, 48 Ld TQFP
ISL6113	3.3	+12 and +3.3 and 3.3 Aux	Current Regulation	Int and Ext	UV Lockout	PGOOD for UV or OC, PE Reset	N	48 Ld QFN
ISL6114	3.3	+12 and +3.3 and 3.3 Aux	Current Regulation	Int and Ext	UV Lockout	PGOOD for UV or OC, PE Reset	N	48 Ld QFN

Isolated Power

Single-Ended (Flyback and Forward)

Device	iSim	Device Description	Control Mode	UVLO Rising (V)	UVLO Falling (V)	V _{BIAS} (max) (V)	No-Load Operating Current (mA)	# of PWM Outputs	FET Driver I _{OUT} (max) (A)	Max Duty Cycle (%)	Package
ISL6401	Y	Synchronizing Current Mode PWM for Subscriber Line Interface Circuits (SLICs)	Peak Current Mode	4.1	3.6	7	3.7	1	1	50	14 Ld SOIC, 16 Ld QFN
ISL6721	Y	Flexible Single Ended Current Mode PWM Controller	Peak Current Mode	8.25	7.7	20	4.5	1	1	100	16 Ld SOIC, 16 Ld TSSOP
ISL6722A		Flexible Single Ended Current Mode PWM Controllers	Peak Current Mode	8.25	7.7	20	4.5	1	1	100	16 Ld QFN, 16 Ld SOIC, 16 Ld TSSOP
ISL6723A		Flexible Single Ended Current Mode PWM Controllers	Peak Current Mode	13	7.7	20	4.5	1	1	100	16 Ld SOIC
ISL6840		Improved Industry-Standard Single-Ended PWM Controller	Peak Current Mode	7	6.6	20	2.3	1	1	100	8 Ld DFN T+R, 8 Ld MSOP, 8 Ld SOIC
ISL6841		Improved Industry-Standard Single-Ended PWM Controller	Peak Current Mode	7	6.6	20	2.3	1	1	50	8 Ld DFN T+R, 8 Ld MSOP, 8 Ld SOIC
ISL6842		Improved Industry-Standard Single-Ended PWM Controller	Peak Current Mode	14.4	8.8	20	2.3	1	1	100	8 Ld DFN T+R, 8 Ld MSOP, 8 Ld SOIC
ISL6843		Improved Industry-Standard Single-Ended PWM Controller	Peak Current Mode	8.4	7.6	20	2.3	1	1	100	8 Ld DFN T+R, 8 Ld MSOP, 8 Ld SOIC
ISL6844	Y	Improved Industry-Standard Single-Ended PWM Controller	Peak Current Mode	14.4	8.8	20	2.3	1	1	50	8 Ld DFN T+R, 8 Ld MSOP, 8 Ld SOIC
ISL6845		Improved Industry-Standard Single-Ended PWM Controller	Peak Current Mode	8.4	7.6	20	2.3	1	1	50	8 Ld DFN T+R, 8 Ld MSOP, 8 Ld SOIC
ISL8840A		High Performance Industry Standard Single-Ended Current Mode PWM Controller	Peak Current Mode	7	6.6	30	2.9	1	1	100	8 Ld MSOP, 8 Ld SOIC
ISL8841A		High Performance Industry Standard Single-Ended Current Mode PWM Controller	Peak Current Mode	7	6.6	30	2.9	1	1	50	8 Ld MSOP, 8 Ld SOIC
ISL8842A		High Performance Industry Standard Single-Ended Current Mode PWM Controller	Peak Current Mode	14.4	8.8	30	2.9	1	1	100	8 Ld MSOP, 8 Ld SOIC
ISL8843		Single-Ended Current Mode PWM Controller with 3% Current Limit and Military Temp Grade Option	Peak Current Mode	8.4	7.6	30	2.9	1	1	100	8 Ld MSOP, 8 Ld SOIC
ISL8843A		High Performance Industry Standard Single-Ended Current Mode PWM Controller	Peak Current Mode	8.4	7.6	30	2.9	1	1	100	8 Ld MSOP, 8 Ld SOIC
ISL8844A		High Performance Industry Standard Single-Ended Current Mode PWM Controller	Peak Current Mode	14.4	8.8	30	2.9	1	1	50	8 Ld MSOP, 8 Ld SOIC
ISL8845A		High Performance Industry Standard Single-Ended Current Mode PWM Controller	Peak Current Mode	8.4	7.6	30	2.9	1	1	50	8 Ld MSOP, 8 Ld SOIC

Double-Ended (Push-pull, Bridge, Bus Converters, Interleaved)

Device	iSim	Device Description	Control Mode	UVLO Rising (V)	UVLO Falling (V)	V _{BIAS} (max) (V)	No-Load Operating Current (mA)	# of PWM Outputs	FET Driver I _{OUT} (max) (A)	Max Duty Cycle (%)	Package
ISL6740	Y	Flexible Double-Ended Voltage-Mode PWM Controller	Voltage Mode	7.25	6.75	20	5	2	0.5	100	16 Ld SOIC, 16 Ld TSSOP
ISL6740A	Y	Flexible Double-Ended Voltage-Mode PWM Controller with Voltage Feed Forward	Voltage Mode	7.25	6.75	20	5	2	0.5	100	16 Ld TSSOP
ISL6741	Y	Flexible Double-Ended Peak-Current-Mode PWM Controller	Peak Current Mode	7.25	6.75	20	5	2	0.5	100	16 Ld SOIC, 16 Ld TSSOP
ISL6742	Y	Advanced Double-Ended PWM Controller with Synchronous Rectifier Control and Average Current Limit	Voltage, Peak Current, or Average Current Mode	8.75	7	20	5	4	0.1	100	16 Ld QSOP
ISL6744	Y	Intermediate Bus Double-Ended PWM Controller with Precision Dead-Time Adjustment	Voltage Mode	6.2	5.7	20	3	2	1	100	8 Ld MSOP, 8 Ld SOIC
ISL6744A		Intermediate Bus PWM Controller	Voltage Mode	6.2	5.7	20	3	2	1	100	8 Ld MSOP, 8 Ld SOIC
ISL6745		Voltage-Mode Double-Ended PWM Controller with Precision Dead-Time Adjustment	Voltage Mode	6.3	5.7	20	3	2	1	100	10 Ld MSOP

Zero-Voltage-Switching (ZVS) Full Bridge

Device	iSim	Device Description	Control Mode	UVLO Rising (V)	UVLO Falling (V)	V _{BIAS} (max) (V)	No-Load Operating Current (mA)	# of PWM Outputs	FET Driver I _{OUT} (max) (A)	Max Duty Cycle (%)	Package
ISL6551		ZVS Full Bridge PWM Controller	Peak Current Mode	9.6	8.6	16	13	6	2	100	28 Ld QFN, 28 Ld SOIC
ISL6752	Y	ZVS Full-Bridge Current-Mode PWM with Adjustable Synchronous Rectifier Control	Peak Current Mode	8.75	7	20	6	6	0.1	100	16 Ld QSOP
ISL6753	Y	ZVS Full-Bridge PWM Controller	Peak Current Mode or Voltage Mode	8.75	7	20	5	4	0.1	100	16 Ld QSOP

LNB Controllers

Single

Device	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (mA)	I _{BIAS} (min) (mA)	Package
ISL6421	8	14	13	18	750	1.5	Eval Board, 32 Ld QFN
ISL6421A	8	14	13	18	500	1.5	Eval Board, 32 Ld QFN
ISL6423	8	14	13.3/14.3	18.3/19.3	750	1.5	Eval Board, 24 Ld QFN, 28 Ld HTSSOP
ISL6423B	8	14	13.3/14.3	18.3/19.3	750	1.5	24 Ld QFN, 28 Ld EPTSSOP
ISL6425	8	14	13	18	750	1.5	Eval Board, 32 Ld QFN

Dual

Device	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (mA)	I _{BIAS} (min) (mA)	Package
ISL6405	8	14	13	18	750	1.5	Eval Board, 32 Ld QFN
ISL6422	8	14	2x13.3/14.3	2x18.3/19.3	2x750	3	38 Ld EPTSSOP, 40 Ld QFN
ISL6422B	8	14	2x13.3/14.3	2x18.3/19.3	2x750	3	38 Ld EPTSSOP, 40 Ld QFN
ISL6424	8	14	13	18	750	1.5	Eval Board, 32 Ld QFN

Linear Regulation

Low Noise

Device	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (mA)	Package
ICL7663S	1.6	16	1.3	16	40	8 Ld PDIP, 8 Ld SOIC
ISL6412	3	3.6	1.8	2.8	840	16 Ld QFN
ISL6414	3	3.6	1.8	2.84	500	16 Ld QFN
ISL6416	3	3.6	1.8	2.8	500	16 Ld QSOP

Low Power

Device	iSim	V _{IN} Range (V)	V _{OUT} Range (V)	Fixed Output Voltage Option	O/P Volt Accuracy (%)	I _{OUT1} (max) (mA)	I _{OUT2} (max) (mA)	PSRR @ 1kHz (dB)	Noise (V _{RMS} 10 to 100) (kHz)	I _Q (μA)	Typical Drop-Out Voltage (mV)	Enable/ Shutdown	# of PORs	Operating Temp. Range (°C)	Package
ISL9000	Y	2.3 to 6.5	1.5 to 3.3	Y	±1.8	300	300	90	30	40	250 @ 300mA	Y	2	-40 to +85	Eval Board, 20 Ld DFN
ISL9000A		2.3 to 6.5	1.5 to 3.3	Y	±1.8	300	300	90	30	40	250 @ 300mA	Y	2	-40 to +85	10 Ld DFN
ISL9001		2.3 to 6.5	1.5 to 3.3	Y	±1.8	300		90	30	25	250 @ 300mA	Y		-40 to +85	8 Ld DFN T+R
ISL9001A		2.3 to 6.5	1.5 to 3.3	Y	±1.8	300		90	30	25	250 @ 300mA	Y		-40 to +85	8 Ld DFN T+R
ISL9003A		2.3 to 6.5	1.5 to 3.3	Y	±1.8	150	N/A	90	20	29	200 @ 150mA	Y	N/A	-40 to +85	5 Ld SC-70 T+R, 6 Ld μTDFN T+R
ISL9005		2.3 to 6.5	1.5 to 3.3	Y	±1.8	300		75	45	50	250 @ 300mA	Y		-40 to +85	8 Ld DFN T+R
ISL9005A		2.3 to 6.5	1.5 to 3.3	Y	±1.8	300		75	45	50	250 @ 300mA	Y		-40 to +85	8 Ld DFN T+R
ISL9007		2.3 to 6.5	1.5 to 3.3	Y	±1.8	400		75	30	50	250 @ 400mA	Y		-40 to +85	8 Ld MSOP
ISL9008A		2.3 to 6.5	1.5 to 3.3	Y	±1.8	150	N/A	65	45	45	200 @ 150mA	Y	N/A	-40 to +85	5 Ld SC-70 T+R, 6 Ld μTDFN T+R
ISL9011		2.3 to 6.5	1.5 to 3.3	Y	±1.8	150	300	70	30	45	250 @ 300mA	Y		-40 to +85	10 Ld DFN
ISL9011A		2.3 to 6.5	1.5 to 3.3	Y	±1.8	150	300	70	30	45	250 @ 300mA	Y		-40 to +85	10 Ld DFN
ISL9012		2.3 to 6.5	1.5 to 3.3	Y	±1.8	150	300	70	30	45	250 @ 300mA	Y	1	-40 to +85	10 Ld DFN

Low Power (Continued)

Device	iSim	V _{IN} Range (V)	V _{OUT} Range (V)	Fixed Output Voltage Option	O/P Volt Accuracy (%)	I _{OUT1} (max) (mA)	I _{OUT2} (max) (mA)	PSRR @ 1kHz (dB)	Noise (V _{RMS} 10 to 100) (kHz)	I _q (μA)	Typical Drop-Out Voltage (mV)	Enable/ Shutdown	# of PORs	Operating Temp. Range (°C)	Package
ISL9014		2.3 to 6.5	1.5 to 3.3	Y	±1.8	300	300	70	30	45	250 @ 300mA	Y		-40 to +85	10 Ld DFN
ISL9014A		2.3 to 6.5	1.5 to 3.3	Y	±1.8	300	300	70	30	45	250 @ 300mA	Y		-40 to +85	10 Ld DFN

High Voltage

Device	iSim	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (mA)	I _{BIAS} (min) (mA)	Package
ISL6720A	Y	17	100	0	20	125	1.2	11 Ld DFN
ISL6719		17	100	1.5	20	100	1.1	9 Ld DFN

Power MOSFET Drivers

Integrated FET Bridge and High-Side Drivers

Device	Device Description	Max Bootstrap Supply Voltage (V)	Max Bias Voltage (V)	Sourcing Current Capability (A)	Sinking Current Capability (A)	Turn-On Prop Delay (μs)	Turn-Off Prop Delay (μs)	Rise Time (μs)	Fall Time (μs)	Package
HIP4020	Full Bridge Driver with Integrated 0.5A Power FETs for Small 3V, 5V and 12V DC Motors	N/A	15	0.5	0.5	2.5	0.1	4	0.1	20 Ld SOIC
ISL6801	High Voltage Bootstrap High Side Driver	110	6.5	0.2	0.2	1	0.1	4	0.1	Ld SOIC

Full Bridge and Three-Phase

Device	Device Description	Max Bootstrap Supply Voltage (V)	Max Bias Voltage (V)	Peak Pull-up Current (A)	Peak Pull-down Current (A)	Turn-On Prop Delay (ns)	Turn-Off Prop Delay (ns)	Rise Time (ns)	Fall Time (ns)	Package
HIP4080A	80V/2.5A Peak, High Frequency Full Bridge FET Driver with Charge Pump and Input Comparators	95	15	2.6	2.4	70	50	10	10	20 Ld PDIP, 20 Ld SOIC
HIP4081A	80V/2.5A Peak, High Frequency Full Bridge FET Driver with Charge Pump and Independent Control Inputs	95	15	2.6	2.4	60	35	10	10	20 Ld PDIP, 20 Ld SOIC
HIP4082	80V/1.25A Peak Current Full Bridge FET Driver	95	15	1.4	1.3	75	55	9	9	16 Ld PDIP, 16 Ld SOIC
HIP4083	80V/0.3A Peak Three Phase High Side Driver	95	15	0.24 (avg)	0.3 (avg)	65	60	35	30	16 Ld PDIP, 16 Ld SOIC
HIP4086	80V/0.5A Peak Three Phase Driver	95	15	0.5	1.1	65	75	20	10	24 Ld PDIP, 24 Ld SOIC
ISL83202	55V, 1A Peak Current H-Bridge FET Driver	70	15	1	1	75	55	9	9	16 Ld PDIP, 16 Ld SOIC
ISL83204A	60V/2.5A Peak, High Frequency Full Bridge FET Driver	75	15	2.6	2.4	70	50	10	10	20 Ld PDIP, 20 Ld SOIC

Half Bridge

Device	Device Description	Max Bootstrap Supply Voltage (V)	Max Bias Voltage (V)	Peak Pull-up Current (A)	Peak Pull-down Current (A)	Turn-On Prop Delay (ns)	Turn-Off Prop Delay (ns)	Rise Time (ns)	Fall Time (ns)	Package
HIP2100	100V/2A Peak High-Frequency Half Bridge Driver with CMOS Logic Inputs	114	14	2	2	20	20	10	10	12 Ld DFN, 16 Ld QFN, 8 Ld EPSON, 8 Ld SOIC
HIP2101	100V/2A Peak High-Frequency Half Bridge Driver with TTL Logic Inputs	114	14	2	2	25	25	10	10	12 Ld DFN, 16 Ld QFN, 8 Ld EPSON, 8 Ld SOIC
ISL2100A	100V, 2A Peak, High Frequency Half-Bridge Drivers	114	14	2	2	39	31	10	10	9 Ld DFN
ISL2101A	100V, 2A Peak, High Frequency Half-Bridge Drivers	114	14	2	2	39	34	10	10	9 Ld DFN
ISL2110	100V, 3A/4A Peak, High Frequency Half-Bridge Drivers	114	14	3	4	38	32	9	7.5	12 Ld DFN, 8 Ld SOIC
ISL2111	100V, 3A/4A Peak, High Frequency Half-Bridge Drivers	114	14	3	4	38	32	9	7.5	10 Ld TDFN, 12 Ld DFN, 8 Ld SOIC
ISL6700	80V/1.25A Peak High-Frequency Half Bridge Driver with TTL Logic Inputs	96	15	1.4	1.3	70	60	5	5	12 Ld QFN, 8 Ld SOIC
ISL89400	100V, 1.25A Peak, High Frequency Half-Bridge Drivers	114	14	1.25	1.25	39	31	16	16	9 Ld DFN, 8 Ld SOIC
ISL89401	100V, 1.25A Peak, High Frequency Half-Bridge Drivers	114	14	1.25	1.25	39	31	16	16	9 Ld DFN, 8 Ld SOIC

Low Side Single

Device	Device Description	# of Drivers	Max Operating Frequency (MHz)	Peak Output I_{PK} (A)	Rise Time (ns)	Fall Time (ns)	Turn On Delay (ns)	Turn Off Delay (ns)	I_S (mA)	R_{ON} (Ω)	Input Signal Range (V)	Input Supply Range (VP)	Max Input Signal (V)	Output Signal Range (V)	Max Output Signal Range (V)	Package
EL7104	High Speed, Single Channel, Power MOSFET Driver	1	10	4	10	15	18	18	7.5	1.5	0 to V_P	+4.5 to +16	16			8 Ld PDIP, 8 Ld SOIC
EL7154	High Speed, Monolithic Pin Driver	1	10	4	20	20	10	20	2.5	1.5	0 to V_P	+4.5 to +16	16	-3 to +15.5	15.5	8 Ld PDIP, 8 Ld SOIC
EL7155	High Performance Pin Driver	1	40	3.5	14.5	15	10	9.5	3	2.7	0 to V_P	+4.5 to +16.5	16	-5 to +16.5	16	8 Ld PDIP, 8 Ld SOIC
EL7156	High Performance Pin Driver	1	40	3.5	14.5	15	10	9.5	3	2.7	0 to V_P	+4.5 to +16.5	16	-5 to +16.5	16	8 Ld PDIP, 8 Ld SOIC
EL7158	Ultra-High Current Pin Driver	1	40	12	12	12	22	22.5	2.5	0.5	0 to V_P	+4.5 to +18	18	-5 to +12	12	8 Ld SOIC
EL7182	2-Phase, High Speed CCD Driver	2	10	2	10	13	18	20	5	3		+4.5 to +16	16			8 Ld PDIP, 8 Ld SOIC

Dual

Device	Device Description	V _{IN} (max) (V)	Max Operating Frequency (MHz)	Peak Output I _{PK} (A)	Rise Time (ns)	Fall Time (ns)	Turn On Delay (ns)	Turn Off Delay (ns)	I _S (mA)	V _{BIAS} (min) (V)	Package
EL7202	High Speed, Dual Channel Power MOSFET Drivers	15	10	2	10	13	18	20	7.5	4.5	8 Ld PDIP, 8 Ld SOIC
EL7212	High Speed, Dual Channel Power MOSFET Drivers	15	10	2	10	13	18	20	2.5	4.5	8 Ld PDIP, 8 Ld SOIC
EL7222	High Speed, Dual Channel Power MOSFET Drivers	15	10	2	10	13	18	20	5	4.5	8 Ld PDIP, 8 Ld SOIC
EL7232	Dual Channel, High Speed, High Current Line Driver with 3-State	15	10	2	10	13	18	20	2.5	4.5	8 Ld PDIP, 8 Ld SOIC
EL7242	Dual Input, High Speed, Dual Channel Power MOSFET Driver	15	10	2	20 (max)	20 (max)	20	20	3	4.5	8 Ld PDIP, 8 Ld SOIC
EL7252	Dual Input, High Speed, Dual Channel Power MOSFET Driver	15	10	2	20 (max)	20 (max)		20	3	4.5	8 Ld PDIP, 8 Ld SOIC
ICL7667	Dual Power MOSFET Driver	15	10	1	30	30		20	5	4.5	8 Ld PDIP, 8 Ld SOIC

Quad

Device	Device Description	# of Drivers	Max Operating Frequency (MHz)	Peak Output I _{PK} (A)	Rise Time (ns)	Fall Time (ns)	Turn On Delay (ns)	Turn Off Delay (ns)	I _S (mA)	R _{ON} (Ω)	Input Signal Range (V)	Input Supply Range (VP)	Max Input Signal (V)	Output Signal Range (V)	Max Output Signal Range (V)	Package
EL7412	High Speed, Four Channel Power MOSFET Drivers	4	10	2	10	13	18	18	5	3						20 Ld SOIC
EL7457	40MHz Non-Inverting Quad CMOS Driver	4	40	2	11	12	13	11.5	0.8	4.5	-V _P to +V _P	-4.5 to +16	16	-4.5 to +16	16	16 Ld QFN, 16 Ld QSOP, 16 Ld SOIC

Synchronous Buck

Device	Device Description	V _{IN} (max)/V _{PWM} (V)	V _{DRIVE} (V)	Output Per Driver I _{LGATE} Source/Sink (A)	Output Per Driver I _{LGATE} Source/Sink (A)	Phase V _{PHASE} (min) (V)	Phase V _{PHASE} (max) (V)	No Load I _S (max) (mA)	I _S (mA)	Package
ISL6614	Dual Advanced Synchronous Rectified Buck MOSFET Drivers with Protection Features	GND - 0.3V to 7V	5 to 12	1.25/2	2/3	GND - 0.3VDC GND - 8V (<400ns)	15VDC, 30V (<200ns)	4.5	7.1	14 Ld SOIC, 16 Ld QFN
ISL6614A	Dual Advanced Synchronous Rectified Buck MOSFET Drivers with Pre-POR OVP	GND - 0.3V to 7V	5 to 12	1.25/2	2/3	GND - 0.3VDC GND - 8V (<400ns)	15VDC, 30V (<200ns)	4.5	7.1	14 Ld SOIC, 16 Ld QFN
ISL6614B	Dual Advanced Synchronous Rectified Buck MOSFET Drivers with Protection Features	GND - 0.3V to 7V	5 to 12	1.25/2	2/3	GND - 0.3VDC GND - 8V (<400ns)	15VDC, 30V (<200ns)	4.5	7.1	14 Ld SOIC, 16 Ld QFN
ISL6594D	Advanced Synchronous Buck MOSFET Driver with 3V PWM Interface and Advanced Protection Features	GND - 0.3V to 7V	4.5 to 13.2	1.25/2	2/3	GND - 0.3VDC GND - 8V (<400ns)	15VDC, 30V (<200ns)	N/A	4.5	10 Ld DFN, 8 Ld SOIC
ISL6594A	Advanced Synchronous Buck MOSFET Driver with 3V PWM Interface and Advanced Protection Features	GND - 0.3V to 7V	5 to 12	1.25/2	2/3	GND - 0.3VDC GND - 8V (<400ns)	15VDC, 30V (<200ns)	2.5	8	10 Ld DFN, 8 Ld SOIC

Synchronous Buck (Continued)

Device	Device Description	V _{IN} (max)/V _{PWM} (V)	V _{DRIVE} (V)	Output Per Driver I _{LGATE} Source/Sink (A)	Output Per Driver I _{LGATE} Source/Sink (A)	Phase V _{PHASE} (min) (V)	Phase V _{PHASE} (max) (V)	No Load I _S (max) (mA)	I _S (mA)	Package
ISL6594B	Advanced Synchronous Buck MOSFET Driver with 3V PWM Interface and Advanced Protection Features	GND - 0.3V to 7V	5 to 12	1.25/2	2/3	GND - 0.3VDC GND - 8V (<400ns)	15VDC, 30V (<200ns)	2.5	4.5	10 Ld DFN, 8 Ld SOIC
ISL6596	Synchronous Rectified MOSFET Driver	3.3 and 5	5	2/2	2/4	GND - 0.3VDC GND - 8V (<20ns)	15VDC, 30V (<100ns)	Almost Negligible	0.19	10 Ld QFN, 8 Ld SOIC
ISL6609	Synchronous Rectified MOSFET Driver	-0.3V to VCC +0.3V	5	2/2	2/4	-8V (<20ns)	15VDC, 30V (<100ns)	Almost Negligible	0.132	8 Ld QFN, 8 Ld SOIC
ISL6609A	Synchronous Rectified MOSFET Driver	-0.3V to VCC +0.3V	5	2/2	2/4	GND - 0.3VDC GND - 8V (<20ns)	15VDC, 30V (<100ns)	Almost Negligible	0.132	8 Ld QFN, 8 Ld SOIC
ISL6610	Dual Synchronous Rectified MOSFET Drivers	22	5	2/2	2/4	-8	30	1.6 (typ)	240μA (typ)	14 Ld SOIC, 16 Ld QFN
ISL6610A	Dual Synchronous Rectified MOSFET Drivers	15	5	2/2	2/4	-8	30	1.6 (typ)	240μA (typ)	14 Ld SOIC, 16 Ld QFN
ISL6612A	Advanced Synchronous Rectified Buck MOSFET Drivers with Pre-POR OVP	GND - 0.3V to 7V	5 to 12	1.25/2	2/3	GND - 0.3VDC GND - 8V (<400ns)	15VDC, 30V (<200ns)	7.2	5	10 Ld DFN, 8 Ld EPSONIC, 8 Ld SOIC
ISL6612B	Advanced Synchronous Rectified Buck MOSFET Drivers with Pre-POR OVP	GND - 0.3V to 7V	5 to 12	1.25/2	2/3	GND - 0.3VDC GND - 8V (<400ns)	15VDC, 30V (<200ns)	4.5	8	10 Ld DFN, 8 Ld EPSONIC, 8 Ld SOIC
ISL6613A	Advanced Synchronous Rectified Buck MOSFET Drivers with Pre-POR OVP	GND - 0.3V to 7V	5 to 12	1.25/2	2/3	GND - 0.3VDC GND - 8V (<400ns)	15VDC, 30V (<200ns)	4.5	5	10 Ld DFN, 8 Ld EPSONIC, 8 Ld SOIC
ISL6613B	Advanced Synchronous Rectified Buck MOSFET Drivers with Pre-POR OVP	GND - 0.3V to 7V	5 to 12	1.25/2	2/3	GND - 0.3VDC GND - 8V (<400ns)	15VDC, 30V (<200ns)	4.5	4.5	10 Ld DFN, 8 Ld EPSONIC, 8 Ld SOIC
ISL6208A	High Voltage Synchronous Rectified Buck MOSFET Driver with Programmable Deadtime	-0.3V to VCC +0.3V	5	2/2	2/4	V _{BOOT} -7	30		0.08	8 Ld QFN, 8 Ld SOIC
ISL6605	Synchronous Rectified MOSFET Driver	17	5	2/2	2/4	V _{BOOT} -7	22		0.002	8 Ld QFN, 8 Ld SOIC
ISL6608	Synchronous Rectified MOSFET Driver	-0.3V to 7V	5	2/2	2/4	V _{BOOT} -7	22		0.08	8 Ld QFN, 8 Ld SOIC
ISL6207	High Voltage Synchronous Rectified Buck MOSFET Driver	-0.3V to VCC +0.3V	5	2/2	2/4	V _{BOOT} -7	30		0.05	8 Ld QFN, 8 Ld SOIC
ISL6208	High Voltage Synchronous Rectified Buck MOSFET Driver with Programmable Deadtime	-0.3V to VCC +0.3V	5	2/2	2/4	V _{BOOT} -7	30		0.08	8 Ld QFN, 8 Ld SOIC
ISL6209	High Voltage Synchronous Rectified Buck MOSFET Driver with Programmable Deadtime	-0.3V to VCC +0.3V	5	2/2	2/4	V _{BOOT} -7	30		0.085	8 Ld QFN, 8 Ld SOIC
ISL6210	Dual Synchronous Rectified MOSFET Drivers	25	5	2	2/4	V _{BOOT} -7	25		0.17	16 Ld QFN
HIP6601B	Synchronous Rectified Buck MOSFET Drivers	12	5 or 12		0.7	-5	15	6.6		8 Ld EPSONIC, 8 Ld SOIC
HIP6602B	Dual Channel Synchronous Rectified Buck MOSFET Driver	12	5 or 12		0.7	-5	15	9		14 Ld SOIC, 16 Ld QFN

Synchronous Buck (Continued)

Device	Device Description	V _{IN} (max)/V _{PWM} (V)	V _{DRIVE} (V)	Output Per Driver I _{LGATE} Source/Sink (A)	Output Per Driver I _{LGATE} Source/Sink (A)	Phase V _{PHASE} (min) (V)	Phase V _{PHASE} (max) (V)	No Load I _S (max) (mA)	I _S (mA)	Package
HIP6603B	Synchronous Rectified Buck MOSFET Drivers	12	5 or 12		0.7	-5	15	7		8 Ld EPSON, 8 Ld SOIC
HIP6604B	Synchronous Rectified Buck MOSFET Drivers	12	5 or 12		0.7	-5	15	9.8		16 Ld QFN
PX3511A	Advanced Synchronous Rectified Buck MOSFET Drivers with Protection Features	15	5 or 12	1.25/2	2/3	GND - 0.3VDC GND - 8V ($<400\text{ns}$)	15VDC, 30V ($<200\text{ns}$)	2.5	4.5	10 Ld DFN, 8 Ld SOIC
PX3511B	Advanced Synchronous Rectified Buck MOSFET Drivers with Protection Features	15	5 or 12	1.25/2	2/3	GND - 0.3VDC GND - 8V ($<400\text{ns}$)	15VDC, 30V ($<200\text{ns}$)	2.5	4.5	10 Ld DFN, 8 Ld SOIC
PX3511D	Advanced Synchronous Rectified Buck MOSFET Driver with Protection Features	13.2	12	1.25/2	2/3	GND - 0.3VDC GND - 8V ($<400\text{ns}$)	15VDC, 30V ($<200\text{ns}$)	N/A	12	10 Ld DFN T+R
ISL6622	VR11.1 Compatible Synchronous Rectified Buck MOSFET Drivers	15	5 to 12	1.25/2	2/3	GND - 0.3VDC GND - 8V ($<200\text{ns}$)	15VDC, 30V ($<200\text{ns}$)	N/A	5.7	10 Ld DFN, 8 Ld SOIC
ISL6622A	VR11.1 Compatible Synchronous Rectified Buck MOSFET Drivers	15	5 to 12	1.25/2	2/3	GND - 0.3VDC GND - 8V ($<200\text{ns}$)	15VDC, 30V ($<200\text{ns}$)	N/A	5.7	10 Ld DFN, 8 Ld SOIC
ISL6615	High-Frequency 6A Sink Synchronous MOSFET Drivers with Protection Features	15	4.5 to 13.2	2.5/4	4/6	GND - 0.3VDC GND - 8V ($<400\text{ns}$)	15VDC, 30V ($<200\text{ns}$)	4.5	8	10 Ld DFN, 8 Ld SOIC
ISL6615A	High-Frequency 6A Sink Synchronous MOSFET Drivers with Protection Features	15	4.5 to 13.2	2.5/4	4/6	GND - 0.3VDC GND - 8V ($<400\text{ns}$)	15VDC, 30V ($<200\text{ns}$)	4.5	8	10 Ld DFN, 8 Ld SOIC
ISL6620	VR11.1 Compatible Synchronous Rectified Buck MOSFET Drivers	15	5	2/2	2/4	GND - 0.3VDC GND - 8V ($<100\text{ns}$)	15VDC, 30V ($<100\text{ns}$)	1.27 (typ)	1.85 (typ)	10 Ld DFN, 8 Ld SOIC
ISL6620A	VR11.1 Compatible Synchronous Rectified Buck MOSFET Drivers	15	5	2/2	2/4	GND - 0.3VDC GND - 8V ($<100\text{ns}$)	15VDC, 30V ($<100\text{ns}$)	1.27 (typ)	1.85 (typ)	10 Ld DFN, 8 Ld SOIC

Power Supply Support ORing FET Control

Device	V _{BIAS} (V)	Transient Voltage Withstanding (V)	Response Time to Dead Short (ns)	Response Time to PS Slow Turn Off (μs)	Ramp	Reverse Current Threshold	Package
ISL6144	+10 to +75	100	<300	<100	Voltage	Resistor-Adjustable (0V to 5.3V)	16 Ld TSSOP, 20 Ld QFN

Power Sequencers

Device	V _{BIAS} (V)	Controlled Voltages (V)	Regulation or Latch-Off for Overcurrent	Int/Ext FET	UV/OV Feature	Reporting	Package
HIP1020	+12 or +5	≤Bias Voltage	N/A	Ext	N/A	N/A	5 Ld SOT-23 T+R

Device	V _{BIAS} Range (V)	Sequenced Voltages or Range (V)	# of Voltages Sequenced	Enable	Output	UV/OV Feature	Package
ISL6123	+1.5 to +5.5	+0.7 to +5.5	Up to 4	Active High	Charge Pumped FET Drive	UV Latch-Off	24 Ld QFN
ISL6124	+1.5 to +5.5	+0.7 to +5.5	Up to 4	Active Low	Charge Pumped FET Drive	UV Latch-Off	24 Ld QFN
ISL6125	+1.5 to +5.5	>+0.7	Up to 4	Active Low	Open Drain Logic	UV Latch-Off	24 Ld QFN
ISL6126	+1.5 to +5.5	+0.7 to +5.5	Up to 4	Active Low	Charge Pumped FET Drive	UV Latch-Off	24 Ld QFN
ISL6127	+1.5 to +5.5	+0.7 to +5.5	Up to 4	Active Low	Charge Pumped FET Drive	UV Latch-Off	24 Ld QFN
ISL6128	+1.5 to +5.5	+0.7 to +5.5	Up to 4	Active Low	Charge Pumped FET Drive	UV Latch-Off	24 Ld QFN
ISL6130	+1.5 to +5.5	+0.7 to +5.5	Up to 4	Active High	Charge Pumped FET Drive	UV Latch-Off	24 Ld QFN

Device	V _{BIAS} (V)	SEQ_ENABLE	# of Sequenced ENABLE Outputs	ENABLE Output Type	Power Down Sequencing	Conditions Reported	Package
ISL8700	2.5 to 24	Auto	4	Active High, Open Drain	N	N/A	14 Ld SOIC
ISL8700A	3.3 to 24	Auto	4	Active High, Open Drain	N	N/A	14 Ld SOIC
ISL8701	2.5 to 24	Auto	4	Active Low, Open Drain	N	N/A	14 Ld SOIC
ISL8701A	3.3 to 24	Auto	4	Active Low, Open Drain	N	N/A	14 Ld SOIC
ISL8702	2.5 to 12	Active High	4	Active High, Open Drain	Y	Power Fault	14 Ld SOIC
ISL8702A	3.3 to 24	SEQ_ENABLE	4	Active High, Open Drain	Y	UV/OV	14 Ld SOIC
ISL8703A	3.3 to 24	SEQ_ENABLE	4	Active Low, Open Drain	Y	UV/OV	14 Ld SOIC
ISL8704A	3.3 to 24	SEQ_ENABLE#	4	Active High, Open Drain	Y	UV/OV	14 Ld SOIC
ISL8705A	3.3 to 24	SEQ_ENABLE#	4	Active Low, Open Drain	Y	UV/OV	14 Ld SOIC
ISL8723	2.5 to 5	SEQ_ENABLE	4	Charge Pumped FET Drive	Y	UV Latch-Off	24 Ld QFN
ISL8724	2.5 to 5	SEQ_ENABLE#	4	Charge Pumped FET Drive	Y	UV Latch-Off	24 Ld QFN

Supervisors

Voltage Monitors with EEPROM I²C Interface

Single

Device	V _S Range (V)	Voltage Threshold 1	Reset Output Type	Watchdog Timer (s)	Manual Reset	Bus Interface	EEPROM Size (kbits)	Battery Monitor and Switchover	Fault Detection Register	Suffix	POR (ms)	RTC Function	Features	Package
X4003	4.5 to 5.5 4.5 to 5.5 2.7-5.5 2.7 to 5.5	4.62 (2.6%) 4.38 (3%) 2.92 (2.4%) 2.62 (2.7%)	Active High	OFF, 0.6, 0.2, 1.4	N	I ² C	0	N	N	-4.5A Blank -2.7A -2.7	200	N		8 Ld MSOP, 8 Ld SOIC
X4005	4.5 to 5.5 4.5 to 5.5 2.7 to 5.5 2.7 to 5.5	4.62 (2.6%) 4.38 (3%) 2.92 (2.4%) 2.62 (2.7%)	Active Low	OFF, 0.6, 0.2, 1.4	N	I ² C	0	N	N	-4.5A Blank -2.7A -2.7	200	N		8 Ld MSOP, 8 Ld SOIC

Single (Continued)

Device	V _S Range (V)	Voltage Threshold 1	Reset Output Type	Watchdog Timer (s)	Manual Reset	Bus Interface	EEPROM Size (kbits)	Battery Monitor and Switchover	Fault Detection Register	Suffix	POR (ms)	RTC Function	Features	Package
X4043	4.5 to 5.5 4.5 to 5.5 2.7 to 5.5 2.7 to 5.5	4.62 (2.6%) 4.38 (3%) 2.92 (2.4%) 2.62 (2.7%)	Active High	OFF, 0.6, 0.2, 1.4	N	I ² C	4	N	N	-4.5A Blank -2.7A -2.7	200	N		8 Ld MSOP, 8 Ld PDIP, 8 Ld SOIC
X4045	4.5 to 5.5 4.5 to 5.5 2.7 to 5.5 2.7 to 5.5	4.62 (2.6%) 4.38 (3%) 2.92 (2.4%) 2.62 (2.7%)	Active Low	OFF, 0.6, 0.2, 1.4	N	I ² C	4	N	N	-4.5A Blank -2.7A -2.7	200	N		8 Ld MSOP, 8 Ld PDIP, 8 Ld SOIC
X4C105	3.0 to 3.6	2.875 (2.6%)	Active High	N	N	I ² C	4	N	N	None	200	N	NOVRAM	20 Ld TSSOP

Dual

Device	V _S Range (V)	Voltage Threshold 1	Voltage Threshold 2	Reset Output Type	Watchdog Timer (s)	Manual Reset	Bus Interface	EEPROM Size (kbits)	Battery Monitor and Switchover	Fault Detection Register	Suffix	POR (ms)	RTC Function	Features	Package
X40010	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	4.6 (1%) 4.6 (1%) 2.9 (1.7%)	2.9 (1.7%) 2.6 (2%) 1.6 (3%)	Active High	OFF, 0.025, 0.2, 1.4	N	I ² C	0	N	Y	-A -B -C	50, 200, 400, 800	N		8 Ld SOIC, 8 Ld TSSOP
X40011	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	4.6 (1%) 4.6 (1%) 2.9 (1.7%)	2.9 (1.7%) 2.6 (2%) 1.6 (3%)	Active Low	OFF, 0.025, 0.2, 1.4	N	I ² C	0	N	Y	-A -B -C	50, 200, 400, 800	N		8 Ld SOIC, 8 Ld TSSOP
X40014	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	2.9 (1.7%) 2.6 (2%) 2.6 (2%)	1.3 (4%) 1.3 (4%) 1.0 (5%)	Active High	OFF, 0.025, 0.2, 1.4	N	I ² C	0	N	Y	-A -B -C	50, 200, 400, 800	N		8 Ld SOIC, 8 Ld TSSOP
X40015	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	2.9 (1.7%) 2.6 (2%) 2.6 (2%)	1.3 (4%) 1.3 (4%) 1.0 (5%)	Active Low	OFF, 0.025, 0.2, 1.4	N	I ² C	0	N	Y	-A -B -C	50, 200, 400, 800	N		8 Ld SOIC, 8 Ld TSSOP
X40020	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	4.6 (1%) 4.6 (1%) 2.9 (1.7%)	2.9 (1.7%) 2.6 (2%) 1.6 (3%)	Active High	OFF, 0.025, 0.2, 1.4	Y	I ² C	0	Y	Y	-A -B -C	50, 200, 400, 800	N	Battery Switch, WDO Out	14 Ld SOIC, 14 Ld TSSOP
X40021	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	4.6 (1%) 4.6 (1%) 2.9 (1.7%)	2.9 (1.7%) 2.6 (2%) 1.6 (3%)	Active Low	OFF, 0.025, 0.2, 1.4	Y	I ² C	0	Y	Y	-A -B -C	50, 200, 400, 800	N		14 Ld SOIC, 14 Ld TSSOP
X40410	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	4.6 (1%) 4.6 (1%) 2.9 (1.7%)	2.9 (1.7%) 2.6 (2%) 1.6 (3%)	Active High	OFF, 0.025, 0.2, 1.4	N	I ² C	4	N	Y	-A -B -C	50, 200, 400, 800	N		8 Ld SOIC, 8 Ld TSSOP
X40411	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	4.6 (1%) 4.6 (1%) 2.9 (1.7%)	2.9 (1.7%) 2.6 (2%) 1.6 (3%)	Active Low	OFF, 0.025, 0.2, 1.4	N	I ² C	4	N	Y	-A -B -C	50, 200, 400, 800	N		8 Ld SOIC, 8 Ld TSSOP
X40414	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	2.9 (1.7%) 2.6 (2%) 2.6 (2%)	1.3 (4%) 1.3 (4%) 1.0 (5%)	Active High	OFF, 0.025, 0.2, 1.4	N	I ² C	4	N	Y	-A -B -C	50, 200, 400, 800	N		8 Ld SOIC, 8 Ld TSSOP

Dual (Continued)

Device	V _S Range (V)	Voltage Threshold 1	Voltage Threshold 2	Reset Output Type	Watchdog Timer (s)	Manual Reset	Bus Interface	EEPROM Size (kbits)	Battery Monitor and Switchover	Fault Detection Register	Suffix	POR (ms)	RTC Function	Features	Package
X40415	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	2.9 (1.7%) 2.6 (2%) 2.6 (2%)	1.3 (4%) 1.3 (4%) 1.0 (5%)	Active Low	OFF, 0.025, 0.2, 1.4	N	I ² C	4	N	Y	-A -B -C	50, 200, 400, 800	N		8 Ld SOIC, 8 Ld TSSOP
X40420	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	4.6 (1%) 4.6 (1%) 2.9 (1.7%)	2.9 (1.7%) 2.6 (2%) 1.6 (3%)	Active High	OFF, 0.025, 0.2, 1.4	Y	I ² C	4	Y	Y	-A -B -C	50, 200, 400, 800	N	Battery Switch, WDO Out	14 Ld SOIC, 14 Ld TSSOP
X40421	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	4.6 (1%) 4.6 (1%) 2.9 (1.7%)	2.9 (1.7%) 2.6 (2%) 1.6 (3%)	Active Low	OFF, 0.025, 0.2, 1.4	Y	I ² C	4	Y	Y	-A -B -C	50, 200, 400, 800	N		14 Ld SOIC, 14 Ld TSSOP
X45620	4.5 to 5.5 4.5 to 5.5 2.7 to 5.5 2.7 to 5.5	4.62 (2.6%) 4.38 (3%) 2.62 (2.7%)	1.75 (2.4%)	Active Low	0.15, 0.4, 0.8	N	I ² C	256	Y	N	-4.5A Blank -2.7A -2.7	150	N	Pins for Both active high and active low	20 Ld TSSOP

Triple

Device	V _S Range (V)	Voltage Threshold 1	Voltage Threshold 2	Voltage Threshold 3	Reset Output Type	Watchdog Timer (s)	Manual Reset	Bus Interface	EEPROM Size (kbits)	Battery Monitor and Switchover	Fault Detection Register	Suffix	POR (ms)	RTC Function	Features	Package
X40030	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	4.6 (1%) 4.6 (1%) 2.9 (1.7%)	2.9 (1.7%) 2.6 (2%) 1.6 (3%)	2.9 (1.7%) 2.6 (2%) 1.6 (3%)	Active High	OFF, 0.025, 0.2, 1.4	Y	I ² C	0	N	Y	-A -B -C	50, 200, 400, 800	N		14 Ld SOIC, 14 Ld TSSOP
X40031	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	4.6 (1%) 4.6 (1%) 2.9 (1.7%)	2.9 (1.7%) 2.6 (2%) 1.6 (3%)	2.9 (1.7%) 2.6 (2%) 1.6 (3%)	Active Low	OFF, 0.025, 0.2, 1.4	Y	I ² C	0	N	Y	-A -B -C	50, 200, 400, 800	N		14 Ld SOIC, 14 Ld TSSOP
X40034	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	2.9 (1.7%) 2.6 (2%) 2.6 (2%)	1.3 (4%) 1.3 (4%) 1.0 (5%)	1.3 (4%) 1.3 (4%) 1.0 (5%)	Active High	OFF, 0.025, 0.2, 1.4	Y	I ² C	0	N	Y	-A -B -C	50, 200, 400, 800	N		14 Ld SOIC, 14 Ld TSSOP
X40035	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	2.9 (1.7%) 2.6 (2%) 2.6 (2%)	1.3 (4%) 1.3 (4%) 1.0 (5%)	1.3 (4%) 1.3 (4%) 1.0 (5%)	Active Low	OFF, 0.025, 0.2, 1.4	Y	I ² C	0	N	Y	-A -B -C	50, 200, 400, 800	N		14 Ld SOIC, 14 Ld TSSOP
X40430	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	4.6 (1%) 4.6 (1%) 2.9 (1.7%)	2.9 (1.7%) 2.6 (2%) 1.6 (3%)	2.9 (1.7%) 2.6 (2%) 1.6 (3%)	Active High	OFF, 0.025, 0.2, 1.4	Y	I ² C	4	N	Y	-A -B -C	50, 200, 400, 800	N		14 Ld SOIC, 14 Ld TSSOP
X40431	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	4.6 (1%) 4.6 (1%) 2.9 (1.7%)	2.9 (1.7%) 2.6 (2%) 1.6 (3%)	2.9 (1.7%) 2.6 (2%) 1.6 (3%)	Active Low	OFF, 0.025, 0.2, 1.4	Y	I ² C	4	N	Y	-A -B -C	50, 200, 400, 800	N		14 Ld SOIC, 14 Ld TSSOP

Triple (Continued)

Device	V _S Range (V)	Voltage Threshold 1	Voltage Threshold 2	Voltage Threshold 3	Reset Output Type	Watchdog Timer (s)	Manual Reset	Bus Interface	EEPROM Size (kbits)	Battery Monitor and Switchover	Fault Detection Register	Suffix	POR (ms)	RTC Function	Features	Package
X40434	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	2.9 (1.7%) 2.6 (2%) 2.6 (2%)	1.3 (4%) 1.3 (4%) 1.0 (5%)	1.3 (4%) 1.3 (4%) 1.0 (5%)	Active High	OFF, 0.025, 0.2, 1.4	Y	I ² C	4	N	Y	-A -B -C	50, 200, 400, 800	N		14 Ld SOIC, 14 Ld TSSOP
X40435	2.7 to 5.5 2.7 to 5.5 2.7 to 3.6	2.9 (1.7%) 2.6 (2%) 2.6 (2%)	1.3 (4%) 1.3 (4%) 1.0 (5%)	1.3 (4%) 1.3 (4%) 1.0 (5%)	Active Low	OFF, 0.025, 0.2, 1.4	Y	I ² C	4	N	Y	-A -B -C	50, 200, 400, 800	N		14 Ld SOIC, 14 Ld TSSOP

Voltage Monitors with EEPROM SPI Interface

Single

Device	V _S Range (V)	Voltage Threshold 1	Reset Output Type	Watchdog Timer (s)	Manual Reset	Bus Interface	EEPROM Size (kbits)	Battery Monitor and Switchover	Fault Detection Register	Suffix	POR (ms)	RTC Function	Features	Package
X5001	4.5 to 5.5 4.5 to 5.5 2.7 to 5.5 2.7 to 5.5	4.62 (2.6%) 4.38 (3%) 2.92 (2.4%) 2.63 (2.7%)	Active Low	OFF, 1.4, 0.6, 0.2	N	SPI	0	N	N	-4.5A Blank -2.7A -2.7	Y	N		8 Ld PDIP, 8 Ld SOIC, 8 Ld TSSOP
X5043	4.5 to 5.5 4.5 to 5.5 2.7 to 5.5 2.7 to 5.5	4.62 (2.6%) 4.38 (3%) 2.92 (2.4%) 2.62 (2.7%)	Active High	OFF, 0.2, 0.6, 1.4	N	SPI	4	N	N	-4.5A Blank -2.7A -2.7	Y	N		14 Ld TSSOP, 8 Ld MSOP, 8 Ld PDIP, 8 Ld SOIC
X5045	4.5 to 5.5 4.5 to 5.5 2.7 to 5.5 2.7 to 5.5	4.62 (2.6%) 4.38 (3%) 2.92 (2.4%) 2.62 (2.7%)	Active Low	OFF, 0.2, 0.6, 1.4	N	SPI	4	N	N	-4.5A Blank -2.7A -2.7	Y	N		14 Ld TSSOP, 8 Ld MSOP, 8 Ld PDIP, 8 Ld SOIC
X5083	4.5 to 5.5 4.5 to 5.5 2.7 to 5.5 2.7 to 5.5	4.63 (2.8%) 4.38 (2.7%) 2.93 (2.7%) 2.63 (3%)	Active Low	OFF, 0.2, 0.6, 1.4	N	SPI	8	N	N	-4.5A Blank -2.7A -2.7	200	N		8 Ld PDIP, 8 Ld SOIC, 8 Ld TSSOP
X5163	4.5 to 5.5 4.5 to 5.5 2.7 to 5.5 2.7 to 5.5	4.62 (2.6%) 4.38 (3%) 2.92 (2.4%) 2.63 (2.7%)	Active High	OFF, 0.2, 0.6, 1.4	N	SPI	16	N	N	-4.5A Blank -2.7A -2.7	200	N		14 Ld TSSOP, 8 Ld PDIP, 8 Ld SOIC
X5165	4.5 to 5.5 4.5 to 5.5 2.7 to 5.5 2.7 to 5.5	4.62 (2.6%) 4.38 (3%) 2.92 (2.4%) 2.63 (2.7%)	Active Low	OFF, 0.2, 0.6, 1.4	N	SPI	16	N	N	-4.5A Blank -2.7A -2.7	200	N		14 Ld TSSOP, 8 Ld PDIP, 8 Ld SOIC
X5168	4.5 to 5.5 4.5 to 5.5 2.7 to 5.5 2.7 to 5.5	4.63 (2.8%) 4.38 (2.7%) 2.93 (2.7%) 2.63 (3%)	Active High	N	N	SPI	16	N	N	-4.5A Blank -2.7A -2.7	200	N	Replaces X25268	14 Ld TSSOP, 8 Ld PDIP, 8 Ld SOIC

Single (Continued)

Device	V _S Range (V)	Voltage Threshold 1	Reset Output Type	Watchdog Timer (s)	Manual Reset	Bus Interface	EEPROM Size (kbits)	Battery Monitor and Switchover	Fault Detection Register	Suffix	POR (ms)	RTC Function	Features	Package
X5169	4.5 to 5.5 4.5 to 5.5 2.7 to 5.5 2.7 to 5.5	4.63 (2.8%) 4.38 (2.7%) 2.93 (2.7%) 2.63 (3%)	Active Low	N	N	SPI	16	N	N	-4.5A Blank -2.7A -2.7	200	N	Replaces X25169	14 Ld TSSOP, 8 Ld PDIP, 8 Ld SOIC
X5323	4.5 to 5.5 4.5 to 5.5 2.7 to 5.5 2.7 to 5.5	4.63 (2.8%) 4.38 (2.7%) 2.93 (2.7%) 2.63 (3%)	Active High	OFF, 0.2, 0.6, 1.4	N	SPI	32	N	N	-4.5A Blank -2.7A -2.7	200	N	Replaces X25323	14 Ld TSSOP, 8 Ld PDIP, 8 Ld SOIC
X5325	4.5 to 5.5 4.5 to 5.5 2.7 to 5.5 2.7 to 5.5	4.63 (2.8%) 4.38 (2.7%) 2.93 (2.7%) 2.63 (3%)	Active Low	OFF, 0.2, 0.6, 1.4	N	SPI	32	N	N	-4.5A Blank -2.7A -2.7	200	N	Replaces X25325	14 Ld TSSOP, 8 Ld PDIP, 8 Ld SOIC
X5328	4.5 to 5.5 4.5 to 5.5 2.7 to 5.5 2.7 to 5.5	4.63 (2.8%) 4.38 (2.7%) 2.93 (2.7%) 2.63 (3%)	Active High	N	N	SPI	32	N	N	-4.5A Blank -2.7A -2.7	200	N	Replaces X25328	14 Ld TSSOP, 8 Ld PDIP, 8 Ld SOIC
X5329	4.5 to 5.5 4.5 to 5.5 2.7 to 5.5 2.7 to 5.5	4.63 (2.8%) 4.38 (2.7%) 2.93 (2.7%) 2.63 (3%)	Active Low	N	N	SPI	32	N	N	-4.5A Blank -2.7A -2.7	200	N	Replaces X25329	14 Ld TSSOP, 8 Ld PDIP, 8 Ld SOIC

Voltage Monitors

Single

Device	Number of Voltage Monitors	Fixed V _{TRIP}	Adj. V _{TRIP} (Resistors)	Reset Output Type	Manual Reset	WDT	Adj. POR Timeout	Features	Package
ISL88001	1	Y	N	Active Low	N	N	N	Ultra Low 160nA Current	3 Ld SC-70 T+R, 3 Ld SOT-23 T+R
ISL88002	1	Y	N	Active Low (Open Drain)	N	N	N	Ultra Low 160nA Current	3 Ld SC-70 T+R, 3 Ld SOT-23 T+R
ISL88003	1	Y	N	Active High	N	N	N	Ultra Low 160nA Current	3 Ld SC-70 T+R, 3 Ld SOT-23 T+R
ISL88011	1	Y	N	Active High and Low	Y	N	Y		5 Ld SOT-23 T+R
ISL88013	1	Y	N	Active High and Low	Y	Y	N	Enhanced WDT	5 Ld SOT-23 T+R
ISL88014	1	N	Y	Active Low	Y	N	Y		5 Ld SOT-23 T+R
ISL88015	1	N	Y	Active Low	Y	Y	N	Enhanced WDT	5 Ld SOT-23 T+R
ISL88016	1	Y	N	Active Low	Y	N	N	26 Pin Selectable V _{TRIP}	6 Ld TSOT T+R
ISL88017	1	Y	N	Active Low	Y	N	N	26 Pin Selectable V _{TRIP}	6 Ld TSOT T+R

Dual

Device	Number of Voltage Monitors	Fixed V_{TRIP}	Adj. V_{TRIP} (Resistors)	Reset Output Type	Manual Reset	WDT	Adj. POR Timeout	Features	Package
ISL6132	2(UV), 2(OV)	N	Y	Active Low	Y	N	N	PGOOD, Individual Reset Outputs, UV/OV Monitor	24 Ld QFN
ISL88012	2	Y	Y	Active High and Low	Y	N	N		5 Ld SOT-23 T+R
ICL7665S	2	N	Y	Active Low	N	N	N	Programmable Hysteresis	8 Ld PDIP, 8 Ld SOIC
ISL88705	2	Y	Y	Active Low	Y	Y	Y	PFI/PFO	8 Ld PDIP, 8 Ld SOIC
ISL88706	2	Y	Y	Active Low	Y	Y	Y	PFI/PFO	8 Ld PDIP, 8 Ld SOIC
ISL88707	2	Y	Y	Active High and Low	Y	Y	Y	PFI/PFO	8 Ld PDIP, 8 Ld SOIC
ISL88708	2	Y	Y	Active High and Low	Y	Y	Y	PFI/PFO	8 Ld PDIP, 8 Ld SOIC
ISL88813	2	Y	Y	Active High	Y	N	N	PFI/PFO	8 Ld PDIP, 8 Ld SOIC
ISL88716	2	Y	Y	Active High	Y	N	N	PFI/PFO	8 Ld PDIP, 8 Ld SOIC

Triple

Device	Number of Voltage Monitors	Fixed V_{TRIP}	Adj. V_{TRIP} (Resistors)	Reset Output Type	Manual Reset	WDT	Adj. POR Timeout	Features	Package
ISL88021	3	Y	Y	Active High and Low	Y	N	Y	OV Monitor	8 Ld MSOP
ISL88022	3	Y	Y	Active High and Low	Y	N	Y	UV/OV Monitor	8 Ld MSOP

Quad

Device	Number of Voltage Monitors	Fixed V_{TRIP}	Adj. V_{TRIP} (Resistors)	Reset Output Type	Manual Reset	WDT	Adj. POR Timeout	Features	Package
ISL6131	4	N	Y	Active Low	Y	N	N	PGOOD, Individual Reset Outputs	24 Ld QFN
ISL6536	4	N	Y	Active Low	Y	N	N		8 Ld SOIC
ISL88041	4	N	Y	Active Low	Y	N	N		8 Ld SOIC

Quintuple

Device	Number of Voltage Monitors	Fixed V_{TRIP}	Adj. V_{TRIP} (Resistors)	Reset Output Type	Manual Reset	WDT	Adj. POR Timeout	Features	Package
ISL88031	5	Y	Y	Active Low	Y	N	N		8 Ld MSOP

Switching Regulation

Backlight Drivers

Device	Device Description	Topologies	# of LEDs (max)	# of Channels	Digital Interface	For LCD Size	I_{OUT} (max) (mA)	Peak Eff. (%)	V_{IN} (V)	V_{OUT} (max) (V)	Freq. (MHz)	I_S (max) (mA)	I_Q (max) (μ A)	I_{SW} (typ) (mA)	Integrated Diode	OVP	Fault Switch	Brightness Control	Package
ISL97801	High Power LED Driver	Inductor Boost or Buck	8	1	N	3.5 to 9	1000	90	2.7 to 16	31	1	3.5	2.5	3600	N	Y	Y	DC or PWM	20 Ld QFN

Boost Controllers

Device	iSim	Device Description	Control Mode	UVLO Rising (V)	UVLO Falling (V)	V _{BIAS} (max) (V)	No-Load Operating Current (mA)	# of PWM Outputs	FET Driver I _{OUT} (max) (A)	Max Duty Cycle (%)	Package
ISL6721	Y	Flexible Single Ended Current Mode PWM Controller	Peak Current Mode	8.25	7.7	20	4.5	1	1	100	16 Ld SOIC, 16 Ld TSSOP
ISL6722A		Flexible Single Ended Current Mode PWM Controllers	Peak Current Mode	8.25	7.7	20	4.5	1	1	100	16 Ld QFN, 16 Ld SOIC, 16 Ld TSSOP
ISL6723A		Flexible Single Ended Current Mode PWM Controllers	Peak Current Mode	13	7.7	20	4.5	1	1	100	16 Ld SOIC
ISL6840		Improved Industry-Standard Single-Ended PWM Controller	Peak Current Mode	7	6.6	20	2.3	1	1	100	8 Ld DFN T+R, 8 Ld MSOP, 8 Ld SOIC
ISL6841		Improved Industry-Standard Single-Ended PWM Controller	Peak Current Mode	7	6.6	20	2.3	1	1	50	8 Ld DFN T+R, 8 Ld MSOP, 8 Ld SOIC
ISL6842		Improved Industry-Standard Single-Ended PWM Controller	Peak Current Mode	14.4	8.8	20	2.3	1	1	100	8 Ld DFN T+R, 8 Ld MSOP, 8 Ld SOIC
ISL6843		Improved Industry-Standard Single-Ended PWM Controller	Peak Current Mode	8.4	7.6	20	2.3	1	1	100	8 Ld DFN T+R, 8 Ld MSOP, 8 Ld SOIC
ISL6844	Y	Improved Industry-Standard Single-Ended PWM Controller	Peak Current Mode	14.4	8.8	20	2.3	1	1	50	8 Ld DFN T+R, 8 Ld MSOP, 8 Ld SOIC
ISL6845		Improved Industry-Standard Single-Ended PWM Controller	Peak Current Mode	8.4	7.6	20	2.3	1	1	50	8 Ld DFN T+R, 8 Ld MSOP, 8 Ld SOIC
ISL8840A		High Performance Industry Standard Single-Ended Current Mode PWM Controller	Peak Current Mode	7	6.6	30	2.9	1	1	100	8 Ld MSOP, 8 Ld SOIC
ISL8841A		High Performance Industry Standard Single-Ended Current Mode PWM Controller	Peak Current Mode	7	6.6	30	2.9	1	1	50	8 Ld MSOP, 8 Ld SOIC
ISL8842A		High Performance Industry Standard Single-Ended Current Mode PWM Controller	Peak Current Mode	14.4	8.8	30	2.9	1	1	100	8 Ld MSOP, 8 Ld SOIC
ISL8843		Single-Ended Current Mode PWM Controller with 3% Current Limit and Military Temp Grade Option	Peak Current Mode	8.4	7.6	30	2.9	1	1	100	8 Ld MSOP, 8 Ld SOIC
ISL8843A		High Performance Industry Standard Single-Ended Current Mode PWM Controller	Peak Current Mode	8.4	7.6	30	2.9	1	1	100	8 Ld MSOP, 8 Ld SOIC
ISL8844A		High Performance Industry Standard Single-Ended Current Mode PWM Controller	Peak Current Mode	14.4	8.8	30	2.9	1	1	50	8 Ld MSOP, 8 Ld SOIC
ISL8845A		High Performance Industry Standard Single-Ended Current Mode PWM Controller	Peak Current Mode	8.4	7.6	30	2.9	1	1	50	8 Ld MSOP, 8 Ld SOIC

Charge Pumps

Device	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (mA)	I _S (typ) (mA)	I _S (max) (mA)	Switching Freq. (kHz)	Package
ICL7660	CMOS Voltage Converters	1.5	12	1.5	22.8	45	0.08	0.165	10	8 Ld PDIP, 8 Ld SOIC
ICL7660S	Super Voltage Converter	1.5	12	1.5	22.8	45	0.08	0.18	10 to 35	8 Ld PDIP, 8 Ld SOIC

Digital Multiphase

Device	Device Description	V _{IN} (max) (V)	V _{DRIVE} (V)	Output Per Driver I _{UGATE} Source/Sink (A)	Output Per Driver I _{LGATE} Source/Sink (A)	Phase V _{PHASE} (min) (V)	Phase V _{PHASE} (max) (V)	No Load I _S (max) (mA)	I _S (mA)	Package
ISL6594A	Advanced Synchronous Buck MOSFET Driver with 3V PWM Interface and Advanced Protection Features	15	5 or 12	1.25/2	2/3	GND - 0.3VDC GND - 8V ($<400\text{ns}$)	15VDC, 30V ($<200\text{ns}$)	2.5	4.5	10 Ld DFN, 8 Ld SOIC
ISL6594B	Advanced Synchronous Buck MOSFET Driver with 3V PWM Interface and Advanced Protection Features	15	5 or 12	1.25/2	2/3	GND - 0.3VDC GND - 8V ($<400\text{ns}$)	15VDC, 30V ($<200\text{ns}$)	2.5	4.5	10 Ld DFN, 8 Ld SOIC
ISL6594D	Advanced Synchronous Buck MOSFET Driver with 3V PWM Interface and Advanced Protection Features	13.2	12	1.25/2	2/3	GND - 0.3VDC GND - 8V ($<400\text{ns}$)	15VDC, 30V ($<200\text{ns}$)	N/A	12	10 Ld DFN, 8 Ld SOIC
PX3511A	Advanced Synchronous Rectified Buck MOSFET Drivers with Protection Features	15	5 or 12	1.25/2	2/3	GND - 0.3VDC GND - 8V ($<400\text{ns}$)	15VDC, 30V ($<200\text{ns}$)	2.5	4.5	10 Ld DFN, 8 Ld SOIC
PX3511B	Advanced Synchronous Rectified Buck MOSFET Drivers with Protection Features	15	5 or 12	1.25/2	2/3	GND - 0.3VDC GND - 8V ($<400\text{ns}$)	15VDC, 30V ($<200\text{ns}$)	2.5	4.5	10 Ld DFN, 8 Ld SOIC
PX3511D	Advanced Synchronous Rectified Buck MOSFET Driver with Protection Features	13.2	12	1.25/2	2/3	GND - 0.3VDC GND - 8V ($<400\text{ns}$)	15VDC, 30V ($<200\text{ns}$)	N/A	12	10 Ld DFN T+R

Device	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	Switching Frequency (kHz)	V _{BIAS} (V)	Application	Package
ISL6595	Digital Multiphase Controller	13	8	0.5	1.6	up to 8	100 to 1000	3.3	VR1	48 Ld QFN

Integrated FET DC/DC

Buck

Single Output

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	I _q (μA)	Switching Frequency (MHz)	Peak Efficiency (%)	POR	BOM Total Footprint	Package
EL7530		Monolithic 600mA Step-Down Regulator with Low Quiescent Current	2.5	5.5	0.8	V _{IN}	0.6	120	1.5	94	N		10 Ld MSOP
EL7531		Monolithic 1A Step-Down Regulator with Low Quiescent Current	2.5	5.5	0.8	V _{IN}	1	120	1.4	80-94	Y	0.78 x 0.27	10 Ld MSOP
EL7532	Y	Monolithic 2A Step-Down Regulator	2.5	5.5	0.8	V _{IN}	2	500	1.5	94	Y		10 Ld MSOP
EL7534	Y	Monolithic 600mA Step-Down Regulator	2.5	5.5	0.8	V _{IN}	0.6	400	1.5	94	Y		10 Ld MSOP
EL7554		Monolithic 4A DC/DC Step-Down Regulator	3	6	0.8	V _{IN}	4	1000	0.2 to 1	95	Y	0.8 x 0.72	28 Ld HTSSOP
EL7566		Monolithic 6A DC/DC Step-Down Regulator	3	6	0.8	V _{IN}	6	1000	0.2 to 1	95	Y	1 x 0.72	28 Ld HTSSOP
ISL6273		1.2A Low Quiescent Current 1.6MHz High Efficiency Synchronous Buck Regulator	2.7	5.5	0.8	V _{IN}	1.2	25	1.6	96	Y		10 Ld DFN
ISL6410	Y	Single Synchronous Buck Regulator with Integrated FET for WLAN Chipsets	3	3.6	1.2, 1.5, 1.8	1.2, 1.5, 1.8	0.6	2300	0.75	90	Y		10 Ld MSOP, 16 Ld QFN
ISL6410A	Y	Single Synchronous Buck Regulator with Integrated FET for WLAN Chipsets	4.5	5.5	1.2, 1.8, 3.3	1.2, 1.8, 3.3	0.6	2300	0.75	90	Y		10 Ld MSOP, 16 Ld QFN
ISL8009A	Y	1.5A Low Quiescent Current 1.6MHz High Efficiency Synchronous Buck Regulator	2.7	5.5	0.8		1.5	17	1.6	95	Y	1cm ²	8 Ld DFN T+R

Single Output (Continued)

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	I _q (μA)	Switching Frequency (MHz)	Peak Efficiency (%)	POR	BOM Total Footprint	Package
ISL8010	Y	Monolithic 600mA Step-Down Regulator with Low Quiescent Current	2.5	5.5	0.8	V _{IN}	0.6	120	1.5	94	N		10 Ld MSOP
ISL8011	Y	1.2A Integrated FETs, High Efficiency Synchronous Buck Regulator	2.7	5.5	0.8	V _{IN}	1.2	5000	1.6	96	Y		10 Ld DFN
ISL8012	Y	2A Low Quiescent Current 1MHz High Efficiency Synchronous Buck Regulator	2.7	5.5	0.8	V _{IN}	2	40	1	95	Y	0.35 x 0.35	10 Ld DFN
ISL8013	Y	3A Low Quiescent Current 1MHz High Efficiency Synchronous Buck Regulator	2.7	5.5	0.8	V _{IN}	3	35	1	97	Y	0.4 x 0.4	16 Ld QFN
ISL8014	Y	4A Low Quiescent Current 1MHz High Efficiency Synchronous Buck Regulator	2.7	5.5	0.8	V _{IN}	4	35	1	97	Y	0.4 x 0.4	16 Ld QFN
ISL8500	Y	2A Standard Buck PWM Regulator	5.5	25	0.6	19	2	80	500	94	Y		12 Ld DFN
ISL8502	Y	2.5A Synchronous Buck Regulator with Integrated MOSFETs	4.5	14	0.6	V _{IN}	2		0.5 to 1.2	95	Y		24 Ld QFN
ISL8540	Y	DC/DC Power Switching Regulator	9	40	1.21	35	2	60	0.1 to 0.6	95	Y		20 Ld HTSSOP
ISL8560	Y	DC/DC Power Switching Regulator	9	60	1.21	55	2	60	0.1 to 0.6	95	Y		20 Ld QFN
ISL9105		600mA Low Quiescent Current 1.6MHz High Efficiency Synchronous Buck Regulator	2.7	5.5	0.8	V _{IN}	0.6	25	1.6	96	Y		8 Ld DFN T+R
ISL9106		1.2A 1.6MHz Low Quiescent Current High Efficiency Synchronous Buck Regulator	2.7	5.5	0.8		1.2	34	1.6	95	Y		10 Ld DFN
ISL9107		1.5A 1.6MHz Low Quiescent Current High Efficiency Synchronous Buck Regulator	2.7	5.5	0.8	V _{IN}	1.5	17	1.6	95	Y	1.0 x 1.0	8 Ld DFN T+R
ISL9108		1.5A 1.6MHz Low Quiescent Current High Efficiency Synchronous Buck Regulator	2.7	5.5	0.8	V _{IN}	1.5	17	1.6	95	N	1.0 x 1.0	8 Ld DFN T+R
ISL9109		RF PA 1.5A DC/DC Regulator	2.7	5.5	0.8	V _{IN}	1.5	4.3	1.6	95	N	1.0 x 1.0	8 Ld DFN T+R
ISL97536		Monolithic 1A Step-Down Regulator with Low Quiescent Current	2.5	6	0.8	6	1	400	1.4	95	Y	0.15 x 0.15	10 Ld MSOP

Multiple Output

Device	iSim	Device Description	# of Outputs	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	I _{LD01} (max) (A)	I _{LD02} (max) (A)	Switching Frequency (MHz)	Peak Efficiency (%)	Package
ISL6455		0.6A PWM Regulator and Dual 0.3A LDOs and Reset	3	3	3.6	0.8	2.5	0.6	0.3	0.3	0.75	93	24 Ld QFN
ISL6455A		0.6A PWM Regulator and Dual 0.3A LDOs and Reset	3	4.5	5.5	0.8	3.3	0.6	0.3	0.3	0.75	93	24 Ld QFN
ISL65426		6A Dual Synchronous Buck Regulator with Integrated MOSFETs	2	3	5.5	1	V _{IN}	6			1	95	50 Ld QFN
ISL8510		Dual Output Controller with 1A Standard Buck PWM and LDO	2	5	25	0.6	22	1	0.5		0.5	95	24 Ld QFN
ISL8501	Y	Triple Output Controller with 1A Standard Buck PWM and Dual LDOs	3	5	25	0.6	22	1	0.5	0.5	0.5	95	24 Ld QFN

Boost

Device	Device Description	Input Voltage (V)	V _{BOOST} (V)	FET Size (A)	V _{ON} (V)	V _{OFF} (V)	V _{LOGIC} (V)	# of V _{COM}	# of Gamma	Features	Package
EL7515	High Frequency PWM Step-Up Regulator	1.8 to 13.2	4.5 to 17	1.4	N/A	N/A	N/A	N/A	N/A	Adjustable frequency, Adjustable softstart, low battery test/indicator	10 Ld MSOP
ISL97516	600kHz/1.2MHz PWM Step-Up Regulator	2.3 to 5.5	5 to 25	2	N/A	N/A	N/A	N/A	N/A	Adjustable Soft-Start, 600kHz/1.2MHz	8 Ld MSOP
ISL97519	1% Output Accuracy 600kHz/1.2MHz PWM Step-Up Regulator	2.3 to 5.5	5 to 25	2	N/A	N/A	N/A	N/A	N/A	Adjustable Soft-Start, 600kHz/1.2MHz	8 Ld MSOP
ISL97519A	600kHz/1.2MHz PWM Step-Up Regulator	2.3 to 5.5	5 to 25	2	N/A	N/A	N/A	N/A	N/A	Adjustable Soft-Start, 600kHz/1.2MHz	8 Ld MSOP
ISL97656	640kHz/1.2MHz PWM Step-Up Regulator	2.3 to 5.5	5 to 25	4	N/A	N/A	N/A	N/A	N/A		10 Ld TDFN

LCD Display Power

Device	Device Description	Input Voltage (V)	V _{BOOST} (V)	FET Size (A)	V _{ON} (V)	V _{OFF} (V)	V _{LOGIC} (V)	# of V _{COM}	# of Gamma	Features	Package
EL7515	High Frequency PWM Step-Up Regulator	1.8 to 13.2	4.5 to 17	1.4	N/A	N/A	N/A	N/A	N/A	Adjustable frequency, Adjustable softstart, low battery test/indicator	10 Ld MSOP
EL7520	4-Channel DC/DC Controller	3 to 5.5	5.5 to 20	Ext FET	5 to 32	-15 to 0	1.2 to 3.3	N/A	N/A	Start-up sequencing (inc. V _{LOGIC}), fault protection	20 Ld QFN
EL7520A	4-Channel DC/DC Controller	3 to 5.5	5.5 to 20	Ext FET	5 to 32	-15 to 0	1.2 to 3.3	N/A	N/A	Start-up sequencing (exc. V _{LOGIC}), fault protection	20 Ld QFN
EL7581	3-Channel DC/DC Converter	2.7 to 14	5 to 17	2.75	5 to 40	-40 to 0	N/A	N/A	N/A	Adjustable frequency, adjustable soft-start	0 Ld HTSSOP
EL7583	3-Channel DC/DC Converter	2.7 to 14	5 to 17	1.75	5 to 40	-40 to 0	N/A	N/A	N/A	Adjustable frequency, adjustable soft-start	20 Ld HTSSOP, 20 Ld TSSOP
EL7584	4-Channel DC/DC Converter	2.7 to 14	5 to 17	1.75	5 to 40	-40 to 0	N/A	1	N/A	Adjustable frequency, adjustable soft-start	24 Ld TSSOP
EL7585	TFT-LCD Power Supply	3 to 5.5	5.5 to 20	3.5	5 to 32	-15 to 0	1.2 to 3.3	N/A	N/A	Start-up sequencing (inc. V _{LOGIC}), fault protection	20 Ld QFN
EL7585A	TFT-LCD Power Supply	3 to 5.5	5.5 to 20	3.5	5 to 32	-15 to 0	1.2 to 3.3	N/A	N/A	Start-up sequencing (exc. V _{LOGIC}), fault protection	20 Ld QFN
EL7586	TFT-LCD Power Supply	3 to 5.5	5.5 to 20	2	5 to 32	-15 to 0	1.2 to 3.3	N/A	N/A	Start-up sequencing (inc. V _{LOGIC}), fault protection	20 Ld QFN
EL7586A	TFT-LCD Power Supply	3 to 5.5	5.5 to 20	2	5 to 32	-15 to 0	1.2 to 3.3	N/A	N/A	Start-up sequencing (exc. V _{LOGIC}), fault protection	20 Ld QFN
ISL97516	600kHz/1.2MHz PWM Step-Up Regulator	2.3 to 5.5	5 to 25	2	N/A	N/A	N/A	N/A	N/A	Adjustable Soft-Start, 600kHz/1.2MHz	8 Ld MSOP
ISL97519	1% Output Accuracy 600kHz/1.2MHz PWM Step-Up Regulator	2.3 to 5.5	5 to 25	2	N/A	N/A	N/A	N/A	N/A	Adjustable Soft-Start, 600kHz/1.2MHz	8 Ld MSOP
ISL97519A	600kHz/1.2MHz PWM Step-Up Regulator	2.3 to 5.5	5 to 25	2	N/A	N/A	N/A	N/A	N/A	Adjustable Soft-Start, 600kHz/1.2MHz	8 Ld MSOP
ISL97522	4-Channel TFT-LCD Supply	4.5 to 20	5 to 30	Ext FET	5.5 to 30	-15 to 0	1 to 3.3 Ext FET	N/A	N/A	Power sequencing, overload protection, thermal shutdown, V _{ON} slice	38 Ld QFN
ISL97642	TFT-LCD DC/DC with Integrated Amplifiers	2.6 to 5.5	3 to 18	2.8	15 to 36	-25 to -5	N/A	1	2		32 Ld TQFN
ISL97645	Boost + V _{ON} Slice + V _{COM}	3 to 5.5	5 to 20	2.6	N/A	N/A	N/A	1	0	V _{ON} slice, UV and OT Protection	24 Ld QFN

LCD Display Power (Continued)

Device	Device Description	Input Voltage (V)	V _{BOOST} (V)	FET Size (A)	V _{ON} (V)	V _{OFF} (V)	V _{LOGIC} (V)	# of V _{COM}	# of Gamma	Features	Package
ISL97645A	Boost + V _{ON} Slice + V _{COM}	2.7 to 5.5	7 to 20	2.6	N/A	N/A	N/A	1	0		24 Ld QFN
ISL97646	Boost + LDO + V _{ON} Slice + V _{COM}	2.7 to 5.5	8 to 20	2.6	7 to 30	N/A	2.5, 2.85, 3.3	1	0	V _{ON} slice, UV and OT Protection	24 Ld QFN T+R
ISL97650	4-Channel Integrated LCD Supply	4 to 13.2	5.5 to 20	3	5.5 to 32	-18 to 0	1 to 3.3 2A FET	N/A	N/A	Power sequencing, overload protection, thermal shutdown, V _{ON} slice	36 Ld QFN
ISL97651	4-Channel Integrated LCD Supply	4 to 5.5	5.5 to 20	4.4	5.5 to 32	-18 to 1	2 to 3.3 2A FET	N/A	N/A	Power sequencing, overload protection, thermal shutdown, V _{ON} slice	36 Ld QFN
ISL97652	4-Channel Integrated LCD Supply with Dual V _{COM} Amplifiers	8 to 15	10 to 19.5	2	5 to 34	-20 to 0	1.2 to 5.5	2	N/A	OVP, Integrated Delay FET, Dual V _{COM}	48 Ld QFN
ISL97653A	5-Channel Integrated LCD Supply	4 to 14	5.5 to 20	4.4	15 to 30	-15 to -5	1.5 to 3.3	N/A	N/A	Integrated V _{ON} Charge Pump and V _{ON} Slice Circuit, Integrated V _{OFF} Charge Pump Output, LDO Controller	40 Ld QFN
ISL97656	640kHz/1.2MHz PWM Step-Up Regulator	2.3 to 5.5	5 to 25	4	N/A	N/A	N/A	N/A	N/A		10 Ld TDFN

Device	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	I _Q (μA)	Switching Frequency (MHz)	Peak Efficiency (%)	POR	BOM Total Footprint	Package
ISL97536	2.5	6	0.8	6	1	400	1.4	95	Y	0.15 x 0.15	10 Ld MSOP

Microcontroller-Friendly

Device	Device Description	Control Mode	UVLO Rising (V)	UVLO Falling (V)	V _{BIAS} (max) (V)	No-Load Operating Current (mA)	# of PWM Outputs	FET Driver I _{OUT} (max) (A)	Max Duty Cycle (%)	Package
ISL6729	Low-Cost Single-Ended Current-Mode PWM for Microcontroller-Based Power Converters	Peak Current Mode	4.5	4.3	7	3.3	1	1	100	8 Ld MSOP, 8 Ld SOIC

Multiphase Controllers

VID Voltage Set

Portable

Device	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	V _{BIAS} (V)	Applications	Package
ISL6244	Multiphase PWM Controller	5.5	25	0.8	1.5	N/A	5	AMD Mobile Hammer	32 Ld QFN
ISL6247	Multiphase PWM Controller for Mobile Intel Pentium 4	5.5	25	License Required for Additional Data	License Required for Additional Data	License Required for Additional Data	License Required for Additional Data	IMVP-IV	40 Ld QFN
ISL6217	PWM Controller for Intel Pentium M	5.5	25	License Required for Additional Data	License Required for Additional Data	License Required for Additional Data	License Required for Additional Data	IMVP-IV	38 Ld TSSOP

Portable (Continued)

Device	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	V _{BIAS} (V)	Applications	Package
ISL6219A	Microprocessor CORE Voltage Regulator Precision Multiphase BUCK PWM Controller for Mobile Applications	5.5	25	1.1	1.85	60	N/A	IMVP-IV	28 Ld SSOP
ISL6217A	PWM Controller, IMVP License Required, CPU Power for Centrino	5.5	25	License Required for Additional Data	License Required for Additional Data	License Required for Additional Data	License Required for Additional Data	License Required for Additional Data	38 Ld TSOT T+R, 38 Ld TSSOP

All-In-One VID

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	V _{BIAS} (V)	Applications	Package
ISL6563	Y	Two-Phase Multiphase Buck PWM Controller with Integrated MOSFET Drivers	5	12	0.8	1.85	≥60	5	VR9, VR10, AMD Hammer™ (Athlon 64™, Opteron™, Sempron™)	24 Ld QFN
ISL6566	Y	Three-Phase Buck PWM Controller with Integrated MOSFET Drivers for VRM9, VRM10, and AMD Hammer Applications	3	12	0.8375	1.6	>100	5	VR9, VR10, AMD Hammer	40 Ld QFN
ISL6566A	Y	Three-Phase Buck PWM Controller with Two Integrated MOSFET Drivers and One External Driver Signal	3	12	0.8375	1.6	>100 (3rd FET Driver External)	5	VR9, VR10, AMD Hammer	40 Ld QFN
ISL6568		Two-Phase Buck PWM Controller with Integrated MOSFET Drivers for VRM9, VRM10, and AMD Hammer Applications	3	12	0.8375	1.6	≥60	5	VR9, VR10, AMD Hammer	32 Ld QFN
ISL6312	Y	Four-Phase Buck PWM Controller with Integrated MOSFET Drivers for Intel VR10, VR11, and AMD Applications	3	12	0.375	1.6	>100 (4th FET Driver External)	5	VR10, VR11, AMD M2 6-Bit	48 Ld QFN
ISL6312A	Y	Four-Phase Buck PWM Controller with Integrated MOSFET Drivers for Intel VR10, VR11, and AMD Applications	5	13.2	0.375	1.6	120	5	Intel VR11/AMD M2 CPU core regulators, low-output-voltage, high-current power supplies, high-current POL modules, high-current embedded voltage regulators, high-current FPGA DC/DC converters	48 Ld QFN
ISL6313	Y	Two-Phase Buck PWM Controller with Integrated MOSFET Drivers for Intel VR11 and AMD Applications	5	12	0.5	1.6	60	5		36 Ld QFN
ISL6322	Y	Four-Phase Buck PWM Controller with Integrated MOSFET Drivers and I ² C Interface for Intel VR10, VR11, and AMD Applications	3	12	0.375	1.99375	>100 (4th FET Driver External)	5	Overclocking, VR10, VR11, AMD M2 6-Bit	48 Ld QFN
ISL6322G	Y	Two-Phase Buck PWM Controller with Integrated MOSFET Drivers, I ² C Interface, and Phase Dropping	3	12	0.375	1.99375	>50	5	Overclocking, VR10, VR11, AMD M2 6-Bit	48 Ld QFN
ISL6323		Hybrid SVI/PVI, Monolithic Dual PWM Hybrid Controller Powering AMD SVI Split-Plane and VI Uniplane Processors	5	12	0	2	120	5	AMD Dual and Single Plane Processors	48 Ld QFN

VRM10/10.1/10.2

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	V _{BIAS} (V)	Applications	Package
ISL6316		Enhanced 4-Phase PWM Controller with 6-Bit VID Code Capable of Precision r _{DS(ON)} or DCR Differential Current Sensing for VR10 Application	3	12	0.8375	1.65	≥130	5	VR10x	40 Ld QFN
ISL6556A	Y	Optimized Multiphase PWM Controller with 6-Bit DAC for VR10.X Application	3	12	0.8375	1.6	≥120	5, 12	VR10	28 Ld SOIC, 32 Ld QFN
ISL6556B		Optimized Multiphase PWM Controller with 6-Bit DAC and Programmable Internal Temperature Compensation for VR10.X Application	3	12	0.8375	1.6	≥120	5, 12	VR10	28 Ld SOIC, 32 Ld QFN
ISL6561	Y	Multiphase PWM Controller with Precision r _{DS(ON)} or DCR Current Sensing	3	12	0.8375	1.65	≥120	5, 12	VR10	40 Ld QFN
ISL6563	Y	Two-Phase Multiphase Buck PWM Controller with Integrated MOSFET Drivers	5	12	0.8	1.85	≥60	5	VR9, VR10, AMD Hammer™ (Athlon 64™, Opteron™, Sempron™)	24 Ld QFN
ISL6565A		Multiphase PWM Controller with Precision r _{DS(ON)} or DCR Current Sensing for VR10.X Application	3	12	0.8375	1.6	>90	5, 12	VR10	28 Ld QFN, 28 Ld SOIC, 28 Ld TSSOP
ISL6565B		Multiphase PWM Controller with Precision r _{DS(ON)} or DCR Current Sensing for VR10.X Application	3	12	0.8375	1.6	>90	5, 12	VR10	28 Ld QFN, 28 Ld SOIC, 28 Ld TSSOP
ISL6566	Y	Three-Phase Buck PWM Controller with Integrated MOSFET Drivers for VRM9, VRM10, and AMD Hammer Applications	3	12	0.8375	1.6	>100	5	VR9, VR10, AMD Hammer	40 Ld QFN
ISL6566A		Three-Phase Buck PWM Controller with Two Integrated MOSFET Drivers and One External Driver Signal	3	12	0.8375	1.6	>100 (3rd MOSFET Driver External)	5	VR9, VR10, AMD Hammer	40 Ld QFN
ISL6568		Two-Phase Buck PWM Controller with Integrated MOSFET Drivers for VRM9, VRM10, and AMD Hammer Applications	3	12	0.8375	1.6	≥60	5	VR9, VR10, AMD Hammer	32 Ld QFN

AMD K7/K8 (Athlon64, Opteron)

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	V _{BIAS} (V)	Applications	Package
HIP6301	Y	Microprocessor CORE Voltage Regulator Multiphase Buck PWM Controller	3	12	1.1	1.85	≥120	5	VR9	20 Ld SOIC
HIP6301V		Microprocessor CORE Voltage Regulator Multiphase Buck PWM Controller	3	12	1.1	1.85	≥120	5	VR9	20 Ld SOIC
HIP6302		Microprocessor CORE Voltage Regulator Multiphase Buck PWM Controller	3	12	1.1	1.85	≥60	5	VR9	16 Ld SOIC
HIP6302V		Microprocessor CORE Voltage Regulator Multiphase Buck PWM Controller	3	12	1.1	1.85	≥60	5	VR9	16 Ld SOIC
ISL6557A		Multiphase PWM Controller for CORE Voltage Regulation	3	12	0.88	1.55	≥120	5	VR9	24 Ld SOIC
ISL6559	Y	Multiphase PWM Controller	3	12	0.8	1.55	≥120	5, 12	AMD Hammer™ (Athlon 64™, Opteron™, Sempron™)	28 Ld SOIC, 32 Ld QFN
ISL6563	Y	Two-Phase Multiphase Buck PWM Controller with Integrated MOSFET Drivers	5	12	0.8	1.85	≥60	5	VR9, VR10, AMD Hammer™ (Athlon 64™, Opteron™, Sempron™)	24 Ld QFN

AMD K7/K8 (Athlon64, Opteron) (Continued)

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	V _{BIAS} (V)	Applications	Package
ISL6566	Y	Three-Phase Buck PWM Controller with Integrated MOSFET Drivers for VRM9, VRM10, and AMD Hammer Applications	3	12	0.8375	1.6	>100	5	VR9, VR10, AMD Hammer	40 Ld QFN
ISL6566A	Y	Three-Phase Buck PWM Controller with Two Integrated MOSFET Drivers and One External Driver Signal	3	12	0.8375	1.6	>100 (3rd FET Driver External)	5	VR9, VR10, AMD Hammer	40 Ld QFN
ISL6568		Two-Phase Buck PWM Controller with Integrated MOSFET Drivers for VRM9, VRM10, and AMD Hammer Applications	3	12	0.8375	1.6	≥60	5	VR9, VR10, AMD Hammer	32 Ld QFN
ISL6569	Y	2 Phase Multiphase Buck PWM Controller	3	12	0.8	1.55	≥60	5, 12	AMD Hammer (Athlon 64™, Opteron™, Sempron™)	24 Ld SOIC, 32 Ld QFN
ISL6569A	Y	2 Phase Buck PWM Controller	3	12	0.8	1.55	≥60	5, 12	AMD Hammer (Athlon 64™, Opteron™, Sempron™)	24 Ld SOIC, 32 Ld QFN

VRM9.0/9.1

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	V _{BIAS} (V)	Applications	Package
HIP6301	Y	Microprocessor CORE Voltage Regulator Multiphase Buck PWM Controller	3	12	1.1	1.85	≥120	5	VR9	20 Ld SOIC
HIP6301V		Microprocessor CORE Voltage Regulator Multiphase Buck PWM Controller	3	12	1.1	1.85	≥120	5	VR9	20 Ld SOIC
HIP6311		Microprocessor CORE Voltage Regulator Multiphase Buck PWM Controller	3	12	1.1	1.85	≥120	5	VR9	20 Ld SOIC
HIP6311A		Microprocessor CORE Voltage Regulator Multiphase Buck PWM Controller	3	12	1.1	1.85	≥120	5	VR9	20 Ld SOIC
HIP6302		Microprocessor CORE Voltage Regulator Multiphase Buck PWM Controller	3	12	1.1	1.85	≥60	5	VR9	16 Ld SOIC
HIP6302V		Microprocessor CORE Voltage Regulator Multiphase Buck PWM Controller	3	12	1.1	1.85	≥60	5	VR9	16 Ld SOIC
ISL6560		Microprocessor Core Voltage Regulator Two Phase Buck PWM Controller	3	12	1.1	1.85	≥60	5	VR9	16 Ld SOIC
ISL6563	Y	Two-Phase Multiphase Buck PWM Controller with Integrated MOSFET Drivers	5	12	0.8	1.85	≥60	5	VR9, VR10, AMD Hammer™ (Athlon 64™, Opteron™, Sempron™)	24 Ld QFN
ISL6566	Y	Three-Phase Buck PWM Controller with Integrated MOSFET Drivers for VRM9, VRM10, and AMD Hammer Applications	3	12	0.8375	1.6	>100	5	VR9, VR10, AMD Hammer	40 Ld QFN
ISL6566A	Y	Three-Phase Buck PWM Controller with Two Integrated MOSFET Drivers and One External Driver Signal	3	12	0.8375	1.6	>100 (3rd FET Driver External)	5	VR9, VR10, AMD Hammer	40 Ld QFN
ISL6568		Two-Phase Buck PWM Controller with Integrated MOSFET Drivers for VRM9, VRM10, and AMD Hammer Applications	3	12	0.8375	1.6	≥60	5	VR9, VR10, AMD Hammer	32 Ld QFN

VRM8.4

Device	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	V _{BIAS} (V)	Applications	Package
HIP6303	Microprocessor CORE Voltage Regulator Multiphase Buck PWM Controller	3	12	1.3	2.05	≥120	5	VR8.4	20 Ld SOIC

VRM8.5

Device	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	V _{BIAS} (V)	Applications	Package
ISL6552	Microprocessor CORE Voltage Regulator Multiphase Buck PWM Controller	3	12	1.05	1.825	≥120	5	VR8.5	20 Ld QFN, 20 Ld SOIC
ISL6553	Microprocessor CORE Voltage Regulator 2 Phase Buck PWM Controller	3	12	1.05	1.825	≥60	5	VR8.5	16 Ld SOIC

Itanium IA-64

Device	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	V _{BIAS} (V)	Applications	Package
ISL6554	Microprocessor CORE Voltage Regulator 2-4 Phase Buck PWM Controller	3	12	0.95	1.7	≥60	5	VR8.5	20 Ld SOIC
ISL6564A	Multiphase PWM Controller with Linear 6-Bit DAC Capable of Precision r _{DS(ON)} or DCR Differential Current Sensing	3	12	0.525	1.3	≥120	5, 12	Montecito	40 Ld QFN

VR11

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	V _{BIAS} (V)	Applications	Package
ISL6306	Y	4-Phase PWM Controller with 8-Bit DAC Code Capable of Precision r _{DS(ON)} or DCR Differential Current Sensing	3	12	0.5	1.6	≥130	5	VR11	40 Ld QFN
ISL6307	Y	6-Phase PWM Controller with 8 Bit VID Code Capable of Precision r _{DS(ON)} or DCR Differential Current	3	12	0.5	1.6	≥200	5	VR11	48 Ld QFN
ISL6307A		Ultra-high bandwidth 6-Phase PWM Controller with 8 Bit VID Code Capable of Precision r _{DS(ON)} or DCR Differential Current Sensing	3	12	0.5	1.6	≥200	5	VR11	48 Ld QFN
ISL6307B		6-Phase VR11 PWM Controller with 8-Bit VID Code Capable of Precision r _{DS(ON)} or DCR Differential Current Sensing for Applications in Which Supply Voltage is Higher than 5V	3	12	0.5	1.6	≥200	12	VR11	48 Ld QFN
ISL6326	Y	4-Phase PWM Controller with 8-Bit DAC Code Capable of Precision DCR Differential Current Sensing	3	12	0.5	1.6	>130	5	VR11 DT, Servers	40 Ld QFN
ISL6326B		4-Phase PWM Controller with 8-Bit DAC Code Capable of Precision DCR Differential Current Sensing	3	12	0.5	1.6	>130	5	VR11 DT, Servers	40 Ld QFN
ISL6327	Y	Enhanced 6-Phase PWM Controller with 8- Bit VID Code and Differential Inductor DCR or Resistor Current Sensing	3	12	0.5	1.6	>200	5	VR11 Workstations, Servers	48 Ld QFN

VR11 (Continued)

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	V _{BIAS} (V)	Applications	Package
ISL6312	Y	Four-Phase Buck PWM Controller with Integrated MOSFET Drivers for Intel VR10, VR11, and AMD Applications	3	12	0.375	1.6	>100 (4th FET Driver External)	5	VR10, VR11, AMD M2 6-Bit	48 Ld QFN
ISL6312A	Y	Four-Phase Buck PWM Controller with Integrated MOSFET Drivers for Intel VR10, VR11, and AMD Applications	5	13.2	0.375	1.6	120	5	Intel VR11/AMD M2 CPU core regulators, low-output-voltage, high-current power supplies, high-current POL modules, high-current embedded voltage regulators, high-current FPGA DC/DC converters	48 Ld QFN
ISL6313	Y	Two-Phase Buck PWM Controller with Integrated MOSFET Drivers for Intel VR11 and AMD Applications	5	12	0.5	1.6	60	5		36 Ld QFN
ISL6322	Y	Four-Phase Buck PWM Controller with Integrated MOSFET Drivers and I ² C Interface for Intel VR10, VR11, and AMD Applications	3	12	0.375	1.99375	>100 (4th FET Driver External)	5	Overclocking, VR10, VR11, AMD M2 6-Bit	48 Ld QFN
ISL6322G	Y	Two-Phase Buck PWM Controller with Integrated MOSFET Drivers, I ² C Interface, and Phase Dropping	3	12	0.375	1.99375	>50	5	Overclocking, VR10, VR11, AMD M2 6-Bit	48 Ld QFN

VR11.1

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	V _{BIAS} (V)	Applications	Package
ISL6333	Y	Three-Phase Buck PWM Controller with Integrated MOSFET Drivers and Light Load Efficiency Enhancements for Intel VR11.1 Applications	5	12	0.5	1.6	100	5	VR11.1	48 Ld QFN
ISL6333A		Three-Phase Buck PWM Controller with Integrated MOSFET Drivers and Light Load Efficiency Enhancements for Intel VR11.1 Applications	5	12	0.5	1.6	100	5	VR11.1	48 Ld QFN
ISL6333B		Three-Phase Buck PWM Controller with Integrated MOSFET Drivers and Light Load Efficiency Enhancements for Intel VR11.1 Applications	5	12	0.5	1.6	100	5	VR11.1	48 Ld QFN
ISL6333C		Three-Phase Buck PWM Controller with Integrated MOSFET Drivers and Light Load Efficiency Enhancements for Intel VR11.1 Applications	5	12	0.5	1.6	100	5	VR11.1	48 Ld QFN
ISL6334		VR11.1, 4-Phase PWM Controller with Light Load Efficiency Enhancement and Load Current Monitoring Features	3	12	0.5	1.6	≥130	5	VR11.1	40 Ld QFN
ISL6334A		VR11.1, 4-Phase PWM Controller with Light Load Efficiency Enhancement and Load Current Monitoring Features	3	12	0.5	1.6	≥130	5	VR11.1	40 Ld QFN
ISL6334B		VR11.1, 4-Phase PWM Controller with Light Load Efficiency Enhancement and Load Current Monitoring Features	3	12	0.5	1.6	≥130	5	VR11.1	40 Ld QFN
ISL6334C		VR11.1, 4-Phase PWM Controller with Light Load Efficiency Enhancement and Load Current Monitoring Features	3	12	0.5	1.6	≥130	5	VR11.1	40 Ld QFN

VR11.1 (Continued)

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	V _{BIAS} (V)	Applications	Package
ISL6336		6-Phase PWM Controller with Light Load Efficiency Enhancement and Current Monitoring	3	12	0.5	1.6	≥200	5	VR11.1	48 Ld QFN
ISL6336A		6-Phase PWM Controller with Light Load Efficiency Enhancement and Current Monitoring	3	12	0.5	1.6	≥200	5	VR11.1	48 Ld QFN
ISL6336B		6-Phase PWM Controller with Light Load Efficiency Enhancement and Current Monitoring	3	12	0.5	1.6	≥200	5	VR11.1	48 Ld QFN

No - VID

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	V _{BIAS} (V)	VRM	Package
ISL6558	Y	Multi-Purpose Precision Multiphase PWM Controller With Optional Active Voltage Positioning	1.2	12	0.8	5	>120	5	N/A	16 Ld SOIC, 20 Ld QFN

AMD SVI Solutions (AM2+)

Device	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	V _{BIAS} (V)	Applications	Package
ISL6323	Hybrid SVI/PVI, Monolithic Dual PWM Hybrid Controller Powering AMD SVI Split-Plane and PVI Uniplane Processors	5	12	0	2	120	5	AMD Dual and Single Plane Processors	48 Ld QFN
ISL6324	Hybrid SVI/PVI with I _{2C} Monolithic Dual PWM Hybrid Controller Powering AMD SVI Split-Plane and PVI Uniplane Processors	5	12	0	2	120	5	AMD Dual and Single Plane Processors with Overclocking	48 Ld QFN

Non-Isolated PWM Controllers

Single Output

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	V _{BIAS} (V)	I _S (min) (mA)	I _S (typ) (mA)	Package
ISL6406		Single Synchronous Buck Pulse-Width Modulation (PWM) Controller	3.3	5	0.8	5	20	3.3 to 5	7	9.8	16 Ld QFN, 16 Ld SOIC, 16 Ld TSSOP
ISL6420	Y	Advanced Single Synchronous Buck Pulse-Width Modulation (PWM) Controller	4.5	16	0.6	V _{IN} -0.5V	20	5	1.4	2	20 Ld QFN, 20 Ld QSOP
ISL6420A	Y	PWM Controller with Wide V _{IN} , Start-Up into Pre-Bias Load	4.5	28	0.6	V _{IN} -0.5V	20	5	1.4	2	20 Ld QFN, 20 Ld QSOP
ISL6526	Y	Single Synchronous Buck Pulse-Width Modulation (PWM) Controller	2.5	5	0.8	V _{IN}	20	3.3 to 5	6.1	6.9	14 Ld SOIC, 16 Ld QFN
ISL6526A	Y	Single Synchronous Buck Pulse-Width Modulation (PWM) Controller	2.5	5	0.8	V _{IN}	20	3.3 to 5	6.1	6.9	14 Ld SOIC, 16 Ld QFN
ISL6527	Y	Single Synchronous Buck Pulse-Width Modulation (PWM) Controller	2.5	5	0.8	V _{IN}	20	3.3 to 5	2.6	3.3	14 Ld SOIC, 16 Ld QFN
ISL6527A	Y	Single Synchronous Buck Pulse-Width Modulation (PWM) Controller	2.5	5	0.8	V _{IN}	20	3.3 to 5	2.6	3.3	14 Ld SOIC, 16 Ld QFN
ISL8104	Y	Synchronous Buck Pulse-Width Modulator (PWM) Controller	1.2	12	0.6	5	30	8 to 12		51	14 Ld SOIC, 16 Ld QFN

Single Output (Continued)

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	V _{BIAS} (V)	I _S (min) (mA)	I _S (typ) (mA)	Package
ISL8105	Y	1V to 12V Single-Phase Synchronous Buck Converter PWM Controller with Integrated MOSFET Gate Drivers	1	12	0.6	5	25	5, 12		3.2	10 Ld DFN, 8 Ld SOIC
ISL8105A	Y	1V to 12V Single-Phase Synchronous Buck Converter PWM Controller with Integrated MOSFET Gate Drivers	1	12	0.6	5	25	5, 12		3.2	10 Ld DFN, 8 Ld SOIC
ISL8105B		+5V or +12V Single-Phase Synchronous Buck Converter PWM Controller with Integrated MOSFET Gate Drivers, Extended Soft-Start Time	1	12	0.6	5	25	5, 12		3.2	10 Ld DFN, 8 Ld SOIC
ISL8106	Y	Wide V _{IN} , 7V to 25V, Single-Phase PWM Controller with Integrated MOSFET Drivers	7	25	0.6	3.3	12	N/A (Internal)	2		16 Ld QFN
ISL8107		Single-Phase Pulse-Width Modulation (PWM) Controller with Wide (9V-75V) V _{IN} Range	9	75	1.2	75	10	N/A (Internal)		2	16 Ld QFN
ISL8118		3.3V to 20V Single-Phase PWM Controller with Integrated 2A/4A MOSFET Drivers	3.3	20	0.6	V _{IN}	30				28 Ld QFN

Multiple Output

Dual Switchmode (PWM)

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	Switching Freq. (kHz)	Package
ISL6225		Dual Mobile-Friendly PWM Controller with DDR Memory Option	3.3	24	0.9	5.5	8	300	28 Ld QSOP
ISL6227	Y	Dual Mobile-Friendly PWM Controller with DDR Option	3.3	24	0.9	5.5	10	300	28 Ld QFN, 28 Ld QSOP
ISL6228	Y	High-Performance Dual-Output Buck Controller for Notebook Applications	3.3	25	0.6	5		200 to 600	28 Ld TQFN
ISL6445	Y	1.4MHz Dual, 180° Out-of-Phase, Step-Down PWM Controller	4.5	24	0.8	5.5	6	1400	24 Ld QSOP
ISL6440	Y	300kHz Dual, 180° Out-of-Phase, Step-Down PWM Controller	4.5	24	0.8	24	10	300	24 Ld QSOP
ISL6530		Dual 5V Synchronous Buck Pulse-Width Modulator (PWM) Controller for DDRAM Memory V _{DDQ} and V _{TT} Termination	5	5	0.8	5	1	300	24 Ld SOIC, 32 Ld QFN
ISL6531		Dual 5V Synchronous Buck Pulse-Width Modulator (PWM) Controller for DDRAM Memory V _{DDQ} and V _{TT} Termination	5	5	0.8	5	20	300	24 Ld SOIC, 32 Ld QFN
ISL6539	Y	Wide Input Range Dual PWM Controller with DDR Option	3.3	18	0.9	5.5	8	300	28 Ld QFN, 28 Ld QSOP
ISL8112		High Light-Load Efficiency, Dual-Output, Main Power Supply Controllers	5.5	25	0.7	5.5	30	400/500, 300/400, 200/300	32 Ld QFN

2-in-1 PWM Switchers + Linear

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT1} (min) (V)	V _{OUT1} (max) (V)	V _{OUT2} (V)	I _{OUT1} (A)	I _{OUT2} (A)	V _{BIAS} (V)	Package
ISL6528	Y	Dual Regulator-Standard Buck PWM and Linear Power Controller	3.3	5	0.8	3.3	0.8 to 3.3	15	4	5	8 Ld SOIC
ISL6529	Y	Dual Regulator-Synchronous Rectified Buck PWM and Linear Power Controller	3.3	5	0.8	3.3	0.8 to 3.3	15	4	12	14 Ld SOIC, 16 Ld QFN
ISL6529A		Dual Regulator-Synchronous Rectified Buck PWM and Linear Power Controller	3.3	5	0.8	3.3	0.8 to 3.3	15	4	12	14 Ld SOIC, 16 Ld QFN
ISL6532		ACPI Regulator/Controller for Dual Channel DDR Memory Systems	2.5	5	0.8	5	0.8 to 5	20	3	5	20 Ld QFN
ISL6549	Y	Single 12V Input Supply Dual Regulator - Synchronous Rectified Buck PWM and Linear Power Controller	1	12	0.8	V _{IN}	0.8 to V _{IN}	20	4	12	14 Ld SOIC, 16 Ld QFN, 16 Ld QSOP
ISL88550A	Y	Synchronous Step Down Controller with Sourcing and Sinking LDO Regulator	2	25	0.7	3.5		15	2.5	5	28 Ld TQFN

Device	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT1} (min) (V)	V _{OUT1} (max) (V)	V _{OUT2} (V)	V _{OUT3} (V)	V _{OUT4} (V)	I _{OUT1} (A)	Package
ISL6537	ACPI Regulator/Controller for Dual Channel DDR Memory Systems	4.5	5.5	0.8	V _{IN}	50% of V _{OUT1}	Adjustable down to 0.8V	Adjustable down to 0.8V	25	28 Ld QFN

3-in-1 PWM Switchers + Linear

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT1} (min) (V)	V _{OUT1} (max) (V)	V _{OUT2} (V)	V _{OUT3} (V)	I _{OUT1} (A)	I _{OUT2} (A)	Package
ISL6443A		300kHz Dual, 180° Out-of-Phase, Step-Down PWM and Single Linear Controller	4.5	24	0.8	24	24	Adj.	10	10	28 Ld QFN, 28 Ld TSSOP
ISL6441	Y	1.4MHz Dual, 180° Out-of-Phase, Step-Down PWM and Single Linear Controller	4.5	24	0.8	24	24	Adj.	6	6	28 Ld QFN
ISL6442	Y	2.5MHz Dual, 180° Out-of-Phase, Step-Down PWM and Single Linear Controller	4.5	24	0.8	24	24	Adj.	20	20	24 Ld QSOP
ISL6532A		3-in-1 ACPI Regulator/Controller for Dual Channel DDR and DDR2 Memory Systems	2.5	5	0.8	5	0.8 to 5	Adj.	20	3	28 Ld QFN
ISL6534	Y	Dual PWM with Linear	3.3	12	0.6	9	0.6 to 9	Adj.	20	20	24 Ld EPTSSOP, 32 Ld QFN
HIP6018B		Advanced PWM and Dual Linear Power Control	5	5	1.3	3.5	Adj.	Adj.	25	0.2	24 Ld SOIC
ISL62391		High-Efficiency, Triple-Output System Power Supply Controller for Notebook Computers	5.5	25	0.6	5.5	0.6 to 5.5	3.3	20	20	28 Ld TQFN
ISL62392		High-Efficiency, Triple-Output System Power Supply Controller for Notebook Computers	5.5	25	0.6	5.5	0.6 to 5.5	3.3	20	20	28 Ld TQFN

4-in-1 PWM Switchers + Linear

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT1} (min) (V)	V _{OUT1} (max) (V)	V _{OUT2} (V)	V _{OUT3} (V)	V _{OUT4} (V)	I _{OUT1} (A)	I _{OUT2} (A)	Package
ISL6232		High Efficiency System Power Supply Controller for Notebook Computers	5.5	25	3.25 (Adj. 0.8)	3.35 (Adj. 5.5)	5 (Adj. 0.8 to 5.5)	3.3 Linear	5 Linear	12		28 Ld QSOP
ISL6236	Y	High-Efficiency, Quad-Output, Main Power Supply Controllers for Notebook Computers	5.5	25	4.975 (Adj. 0.7)	5.125 (Adj. 5.5)	3.3 (Adj. 0.5 to 2.5)	3.3 or 5 Linear (Adj. 0.7 to 4.5)	3.3 Always Linear	20		32 Ld QFN

4-in-1 PWM Switchers + Linear (Continued)

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT1} (min) (V)	V _{OUT1} (max) (V)	V _{OUT2} (V)	V _{OUT3} (V)	V _{OUT4} (V)	I _{OUT1} (A)	I _{OUT2} (A)	Package
ISL6236A		High-Efficiency, Quad-Output, Main Power Supply Controllers for Notebook Computers	4.5	25	4.975 (Adj. 0.7)	5.125 (Adj. 5.5)	3.3 (Adj. 0.5 to 2.5)	3.3 or 5 Linear (Adj. 0.7 to 4.5)	3.3 Always Linear	20		32 Ld QFN
ISL6432		PWM and Triple Linear Power Controller for Home Gateway Applications	5	5	0.8	5	2.5	1.8	1.5			16 Ld SOIC T+R
ISL6521	Y	PWM Buck DC/DC and Triple Linear Power Controller	5	5	0.8	4.5	Adj.	Adj.	Adj.	20		16 Ld SOIC
ISL6523		VRM8.5 Dual PWM and Dual Linear Power System Controller	5	5	1.05	1.825	1.2 (also Adj. Higher)	1.5 (also Adj. Higher)	1.8 (also Adj. Higher)	25		28 Ld SOIC
ISL6524		VRM8.5 PWM and Triple Linear Power System Controller	5	5	1.05	1.825	1.2 (also Adj. Higher)	1.5 (also Adj. Higher)	1.8 (also Adj. Higher)	25		28 Ld SOIC
ISL6524A		VRM8.5 PWM and Triple Linear Power System Controller	5	5	1.05	1.825	1.2 (also Adj. Higher)	1.5 (also Adj. Higher)	1.8 (also Adj. Higher)	25		28 Ld SOIC
ISL6537		ACPI Regulator/Controller for Dual Channel DDR Memory Systems	4.5	5.5	0.8	V _{IN}	50% of V _{OUT1}	Adjustable down to 0.8V	Adjustable down to 0.8V	25		28 Ld QFN
ISL6548		ACPI Regulator/Controller for Dual Channel DDR Memory Systems	4.5	5.5	0.8	V _{IN}	50% of V _{OUT1}	Adjustable down to 0.8V	Adjustable down to 0.8V	25		28 Ld QFN
HIP6019B		Advanced Dual PWM and Dual Linear Power Control	5	5	1.3	3.5	Adj.	Adj.	Adj.	25		28 Ld SOIC
HIP6021		Advanced PWM and Triple Linear Power Controller	5	5	1.3	3.5	1.5 or 3.3 (also Adj. Higher)	1.5 (also Adj. Higher)	1.8 (also Adj. Higher)	25		28 Ld SOIC
HIP6521	Y	PWM and Triple Linear Power Controller	5	5	0.8	4.5	Adj.	Adj.	Adj.	20		16 Ld SOIC
ISL62381		High-Efficiency, Quad-Output System Power Supply Controller for Notebook Computers	5.5	25	0.6	5.5	0.6 to 5.5	Adj.	5	20		32 Ld TQFN
ISL62382		High-Efficiency, Quad-Output System Power Supply Controller for Notebook Computers	5.5	25	0.6	5.5	0.6 to 5.5	Adj.	5	20		32 Ld TQFN
ISL62383		High-Efficiency, Quad-Output System Power Supply Controller for Notebook Computers	5.5	25	0.6	5.5	0.6 to 5.5	Adj.	5	20		28 Ld TQFN
ISL9440	Y	Triple, 180° Out-of-Phase, Step-Down PWM and Single Linear Controller	4.5	24	0.8	24	Adj.	Adj.		20	20	32 Ld QFN
ISL9440A	Y	Triple, 180° Out-of-Phase, Step-Down PWM and Single Linear Controller	4.5	24	0.8	24	Adj.	Adj.		20	20	32 Ld QFN
ISL9441	Y	Triple, 180° Out-of-Phase, Step-Down PWM and Single Linear Controller	4.5	24	0.8	24	Adj.	Adj.		20	20	32 Ld QFN

5-in-1 PWM Switchers + Linear

Device	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT1} (min) (V)	V _{OUT1} (max) (V)	V _{OUT2} (V)	V _{OUT3} (V)	V _{OUT4} (V)	V _{OUT5} (V)	Package
ISL6537A	ACPI Regulator/Controller for Dual Channel DDR Memory Systems	4.5	5.5	0.8	V _{IN}	50% of V _{OUT1}	Adjustable down to 0.8V	Adjustable down to 0.8V	Adjustable down to 0.8V	28 Ld QFN
ISL6548A	ACPI Regulator/Controller for Dual Channel DDR Memory Systems	5.5	4.5	0.8	V _{IN}	50% of V _{OUT1}	Adjustable down to 0.8V	Adjustable down to 0.8V	Adjustable down to 0.8V	28 Ld QFN

ACPI Controllers

Device	Device Description	Chip Set Supported	3.3VDUAL Regulator	5VDUAL Regulator	Memory Regulator (V)	Integrated Clock Regulator	Southbridge Resume Well Regulator (V)	VID Regulator (V)	3.3VSBY Regulator	Package
ISL6504	Multiple Linear Power Controller with ACPI Control Interface	i845G with ICH4	Y	Y		N	1.8	1.2	N	16 Ld SOIC, 20 Ld QFN
ISL6504A	Multiple Linear Power Controller with ACPI Control Interface	i845G with ICH4	Y	Y		N	1.5	1.2	N	16 Ld SOIC, 20 Ld QFN
ISL6505	Multiple Linear Power Controller with ACPI Control Interface	Springdale with ICH5	Y	Y		N		1.2	N	20 Ld QFN, 20 Ld SOIC
ISL6506	Multiple Linear Power Controller with ACPI Control Interface	i810, i815, i820, i845, i865, i875, i915, i925, i945, i955 for ICH4, ICH5, ICH6	Y	Y	N	N	N	N	Y	8 Ld EPSON
ISL6506A	Multiple Linear Power Controller with ACPI Control Interface	i810, i815, i820, i845, i865, i875, i915, i925, i945, i955 for ICH4, ICH5, ICH6, ICH7	Y	Y	N	N	N	N	Y	8 Ld EPSON
ISL6506B	Multiple Linear Power Controller with ACPI Control Interface	i810, i815, i820, i845, i865, i875, i915, i925, i945, i955 for ICH4, ICH5, ICH6, ICH8	Y	Y	N	N	N	N	Y	8 Ld EPSON
HIP6501A	Triple Linear Power Controller with ACPI Control Interface	i810/i810e/i815/i820, SiS620/5595, SiS630, VIA Apollo ProMedia133	Y	Y	2.5 or 3.3 (Selectable)				N	16 Ld SOIC
HIP6503	Multiple Linear Power Controller with ACPI Control Interface	i810/i820 with ICH2	Y	Y	2.5 or 3.3 (Selectable)	Y	1.8		N	20 Ld SOIC

Low Power

Device	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	Supply Current V _{CC} (mA)	Supply Current LV _{CC} (mA)	V _{OUT1} (min) (V)	V _{OUT1} (max) (V)	V _{OUT2} (V)	V _{OUT3} (V)	I _{OUT1} (mA)	I _{OUT2} (mA)	I _{OUT3} (mA)	I ² C	Package
ISL6271A	Integrated XScale Regulator	2.76	5.5	50	40	0.85	1.6	1.1	1.3	800	50	40	Y	20 Ld QFN

Multiphase Controllers

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	V _{BIAS} (V)	I _S (min) (mA)	I _S (typ) (mA)	Package
ISL6308	Y	Three-Phase Buck PWM Controller with High Current Integrated MOSFET Drivers	5	12	0.6	2.3	100	5		15	40 Ld QFN
ISL6310		Two-Phase Buck PWM Controller with High Current Integrated MOSFET Drivers	5	12	0.6	2.3	>60	5		15	32 Ld QFN
ISL6315		Two-Phase Multiphase Buck PWM Controller with MOSFET Drivers Integrated (No Droop)	5	12	0.8375	1.6	>60	5	4	6	24 Ld QFN
ISL6567	Y	Multipurpose Two-Phase Buck PWM Controller with Integrated MOSFET Drivers	3	20	0.6	5	>60	5 to 12		7.6	24 Ld QFN
ISL8120		Dual/n-Phase Buck PWM Controller with Integrated Drivers	2.97	22	0.6	90% of V _{IN}	>60	2.97 to 5.60	8	12	32 Ld QFN
ISL8121	Y	3V to 20V, Two-Phase Buck PWM Controller with Integrated 4A MOSFET Drivers	3	20	0.6	66% of V _{IN}	>60	5 to 12		7.6	24 Ld QFN

OLED Power ICs

Device	Device Description	Topologies	I _{OUT} (max) (mA)	Peak Efficiency (%)	V _{IN} (V)	V _{OUT} (max) (V)	Frequency (MHz)	I _S (max) (mA)	I _q (max) (μA)	I _{sw} (typ) (mA)	Integrated Diode	OVP	Package
ISL97701	Boost Regulator with Integrated Schottky and Input Disconnect Switch	Inductor Boost	130	87	2.3 to 5.5	28	1	1	1	1200	Y	Y	10 Ld DFN
ISL97702	Boost Regulator with Dual Feedback Paths and Output Disconnect for Passive OLED Power Applications	Inductor Boost	130	87	2.3 to 5.5	28	1	1	1	1200	Y	Y	10 Ld DFN

Single Phase Controllers

VID Voltage Set

All-In-One VID

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	V _{BIAS} (V)	Package
ISL6314	Y	Single-Phase Buck PWM Controller with Integrated MOSFET Drivers for Intel VR11 and AMD Applications	3	12	0.375	1.6	≥30	5 to 12	32 Ld QFN

Single Output

Integrated FET DC/DC

Buck - Single Output

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	I _q (μA)	Switching Frequency (MHz)	Peak Efficiency (%)	POR	BOM Total Footprint	Package
EL7530		Monolithic 600mA Step-Down Regulator with Low Quiescent Current	2.5	5.5	0.8	V _{IN}	0.6	120	1.5	94	N		10 Ld MSOP
EL7531		Monolithic 1A Step-Down Regulator with Low Quiescent Current	2.5	5.5	0.8	V _{IN}	1	120	1.4	80-94	Y	0.78 x 0.27	10 Ld MSOP
EL7532	Y	Monolithic 2A Step-Down Regulator	2.5	5.5	0.8	V _{IN}	2	500	1.5	94	Y		10 Ld MSOP
EL7534	Y	Monolithic 600mA Step-Down Regulator	2.5	5.5	0.8	V _{IN}	0.6	400	1.5	94	Y		10 Ld MSOP
EL7554		Monolithic 4A DC/DC Step-Down Regulator	3	6	0.8	V _{IN}	4	1000	0.2 to 1	95	Y	0.8 x 0.72	28 Ld HTSSOP
EL7566		Monolithic 6A DC/DC Step-Down Regulator	3	6	0.8	V _{IN}	6	1000	0.2 to 1	95	Y	1 x 0.72	28 Ld HTSSOP
ISL6273		1.2A Low Quiescent Current 1.6MHz High Efficiency Synchronous Buck Regulator	2.7	5.5	0.8	V _{IN}	1.2	25	1.6	96	Y		10 Ld DFN
ISL6410	Y	Single Synchronous Buck Regulator with Integrated FET for WLAN Chipsets	3	3.6	1.2, 1.5, 1.8	1.2, 1.5, 1.8	0.6	2300	0.75	90	Y		10 Ld MSOP, 16 Ld QFN
ISL6410A	Y	Single Synchronous Buck Regulator with Integrated FET for WLAN Chipsets	4.5	5.5	1.2, 1.8, 3.3	1.2, 1.8, 3.3	0.6	2300	0.75	90	Y		10 Ld MSOP, 16 Ld QFN
ISL8009A	Y	1.5A Low Quiescent Current 1.6MHz High Efficiency Synchronous Buck Regulator	2.7	5.5	0.8		1.5	17	1.6	95	Y	1cm ²	8 Ld DFN T+R
ISL8010	Y	Monolithic 600mA Step-Down Regulator with Low Quiescent Current	2.5	5.5	0.8	V _{IN}	0.6	120	1.5	94	N		10 Ld MSOP
ISL8011	Y	1.2A Integrated FETs, High Efficiency Synchronous Buck Regulator	2.7	5.5	0.8	V _{IN}	1.2	5000	1.6	96	Y		10 Ld DFN
ISL8012	Y	2A Low Quiescent Current 1MHz High Efficiency Synchronous Buck Regulator	2.7	5.5	0.8	V _{IN}	2	40	1	95	Y	0.35 x 0.35	10 Ld DFN

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Power
Management

Buck - Single Output (Continued)

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	I _q (μA)	Switching Frequency (MHz)	Peak Efficiency (%)	POR	BOM Total Footprint	Package
ISL8013	Y	3A Low Quiescent Current 1MHz High Efficiency Synchronous Buck Regulator	2.7	5.5	0.8	V _{IN}	3	30	1	97	Y	0.4 x 0.4	16 Ld QFN
ISL8014	Y	4A Low Quiescent Current 1MHz High Efficiency Synchronous Buck Regulator	2.7	5.5	0.8	V _{IN}	4	30	1	97	Y	0.4 x 0.4	16 Ld QFN
ISL8500	Y	2A Standard Buck PWM Regulator	5.5	25	0.6	19	2	80	500	94	Y		12 Ld DFN
ISL8502	Y	2.5A Synchronous Buck Regulator with Integrated MOSFETs	4.5	14	0.6	V _{IN}	2.5		0.5 to 1.2	95	Y		24 Ld QFN
ISL8540	Y	DC/DC Power Switching Regulator	9	40	1.21	35	2	60	0.1 to 0.6	95	Y		20 Ld HTSSOP
ISL8560	Y	DC/DC Power Switching Regulator	9	60	1.21	55	2	60	0.1 to 0.6	95	Y		20 Ld EPTSSOP, 20 Ld QFN
ISL9105		600mA Low Quiescent Current 1.6MHz High Efficiency Synchronous Buck Regulator	2.7	5.5	0.8	V _{IN}	0.6	25	1.6	96	Y		8 Ld DFN T+R
ISL9106		1.2A 1.6MHz Low Quiescent Current High Efficiency Synchronous Buck Regulator	2.7	5.5	0.8		1.2	34	1.6	95	Y		10 Ld DFN
ISL9107		1.5A 1.6MHz Low Quiescent Current High Efficiency Synchronous Buck Regulator	2.7	5.5	0.8	V _{IN}	1.5	17	1.6	95	Y	1.0 x 1.0	8 Ld DFN T+R
ISL9108		1.5A 1.6MHz Low Quiescent Current High Efficiency Synchronous Buck Regulator	2.7	5.5	0.8	V _{IN}	1.5	17	1.6	95	N	1.0 x 1.0	8 Ld DFN T+R
ISL9109		1.5A 1.6MHz Low Quiescent Current High Efficiency Synchronous Buck Regulator	2.7	5.5	0.8	V _{IN}	1.5	4.3	1.6	95	N	1.0 x 1.0	8 Ld DFN T+R
ISL97536		Monolithic 1A Step-Down Regulator with Low Quiescent Current	2.5	6	0.8	6	1	400	1.4	95	Y	0.15 x 0.15	10 Ld MSOP

Boost

Device	Device Description	Input Voltage (V)	V _{BOOST} (V)	FET Size (A)	V _{ON} (V)	V _{OFF} (V)	V _{LOGIC} (V)	# of V _{COM}	# of Gamma	Features	Package
EL7515	High Frequency PWM Step-Up Regulator	1.8 to 13.2	4.5 to 17	1.4	N/A	N/A	N/A	N/A	N/A	Adjustable frequency, Adjustable softstart, low battery test/indicator	10 Ld MSOP
ISL97516	600kHz/1.2MHz PWM Step-Up Regulator	2.3 to 5.5	5 to 25	2	N/A	N/A	N/A	N/A	N/A	Adjustable Soft-Start, 600kHz/1.2MHz	8 Ld MSOP
ISL97519	1% Output Accuracy 600kHz/1.2MHz PWM Step-Up Regulator	2.3 to 5.5	5 to 25	2	N/A	N/A	N/A	N/A	N/A	Adjustable Soft-Start, 600kHz/1.2MHz	8 Ld MSOP
ISL97519A	600kHz/1.2MHz PWM Step-Up Regulator	2.3 to 5.5	5 to 25	2	N/A	N/A	N/A	N/A	N/A	Adjustable Soft-Start, 600kHz/1.2MHz	8 Ld MSOP
ISL97656	640kHz/1.2MHz PWM Step-Up Regulator	2.3 to 5.5	5 to 25	4	N/A	N/A	N/A	N/A	N/A		10 Ld TDFN

Synchronous Buck Regulators

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	I _q (μA)	Switching Frequency (MHz)	Peak Efficiency (%)	POR	BOM Total Footprint	Package
ISL8502	Y	2.5A Synchronous Buck Regulator with Integrated MOSFETs	4.5	14	0.6	V _{IN}	2.5		0.5 to 1.2	95	Y		24 Ld QFN
ISL9106		1.2A 1.6MHz Low Quiescent Current High Efficiency Synchronous Buck Regulator	2.7	5.5	0.8		1.2	34	1.6	95	Y		10 Ld DFN
ISL9107		1.5A 1.6MHz Low Quiescent Current High Efficiency Synchronous Buck Regulator	2.7	5.5	0.8	V _{IN}	1.5	17	1.6	95	Y	1.0 x 1.0	8 Ld DFN T+R
ISL9108		1.5A 1.6MHz Low Quiescent Current High Efficiency Synchronous Buck Regulator	2.7	5.5	0.8	V _{IN}	1.5	17	1.6	95	N	1.0 x 1.0	8 Ld DFN T+R
ISL9109		RF PA 1.5A DC/DC Regulator	2.7	5.5	0.8	V _{IN}	1.5	4.3	1.6	95	N	1.0 x 1.0	8 Ld DFN T+R

Synchronous Buck Controllers

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	V _{BIAS} (V)	I _S (min) (mA)	I _S (typ) (mA)	Package
ISL6268		High-Performance Notebook PWM Controller	7	25	0.6	3.3	25	5	N/A	1.7	16 Ld QSOP
ISL6269	Y	High-Performance Notebook PWM Controller with Bias Regulator and Audio-Frequency Clamp	7	25	0.6	3.3	25	N/A (Internal)	2		16 Ld QFN
ISL6269A	Y	High-Performance Notebook PWM Controller	5	25	0.6	3.3	25	5	N/A	1.7	16 Ld QFN
ISL6269B		High-Performance Notebook PWM Controller with Audio-Frequency Clamp	7	25	0.6	3.3	5	5	N/A	1.7	16 Ld QFN
ISL6406		Single Synchronous Buck Pulse-Width Modulation (PWM) Controller	3.3	5	0.8	5	20	3.3 to 5	7	9.8	16 Ld QFN, 16 Ld SOIC, 16 Ld TSSOP
ISL6420	Y	Advanced Single Synchronous Buck Pulse-Width Modulation (PWM) Controller	4.5	16	0.6	V _{IN} -0.5V	20	5	1.4	2	20 Ld QFN, 20 Ld QSOP
ISL6420A	Y	PWM Controller with Wide V _{IN} , Start-Up into Pre-Bias Load	4.5	28	0.6	V _{IN} -0.5V	20	5	1.4	2	20 Ld QFN, 20 Ld QSOP
ISL6439		Single Sync Buck PWM Controller for Broadband Gateway Applications	3.3	5	0.8	3.3	20	3.3	6.1	6.9	14 Ld SOIC, 16 Ld QFN
ISL6439A		Single Sync Buck PWM Controller for Broadband Gateway Applications	3.3	5	0.8	3.3	20	3.3	6.1	6.9	14 Ld SOIC, 16 Ld QFN
ISL6520		Single Synchronous Buck Pulse-Width Modulation (PWM) Controller	2.5	5	0.8	5	20	5		3.2	16 Ld QFN, 8 Ld SOIC
ISL6520A	Y	Single Synchronous Buck Pulse-Width Modulation (PWM) controller ISL6520A	2.5	5	0.8	5	20	5		3.2	16 Ld QFN, 8 Ld SOIC
ISL6520B		Single Synchronous Buck Pulse-Width Modulation (PWM) Controller	2.5	5	0.8	5	20	5		3.2	16 Ld QFN, 8 Ld SOIC
ISL6522		Buck and Synchronous Rectifier Pulse-Width Modulator (PWM) Controller	2.5	12	0.8	V _{IN}	25	12		5	14 Ld SOIC, 14 Ld TSSOP, 16 Ld QFN
ISL6522A		Buck and Synchronous Rectifier Pulse-Width Modulator (PWM) Controller	2.5	12	0.8	V _{IN}	25	12		5	14 Ld SOIC, 16 Ld QFN
ISL6522B		Buck and Synchronous Rectifier Pulse-Width Modulator (PWM) Controller	2.5	12	0.8	V _{IN}	25	12		5	14 Ld SOIC, 14 Ld TSSOP, 16 Ld QFN
ISL6525		Buck and Synchronous-Rectifier Pulse-Width Modulator (PWM) Controller	2.5	12	1.2	V _{IN}	25	12		5	14 Ld SOIC

Synchronous Buck Controllers (Continued)

Device	iSim	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	V _{BIAS} (V)	I _S (min) (mA)	I _S (typ) (mA)	Package
ISL6526	Y	Single Synchronous Buck Pulse-Width Modulation (PWM) Controller	2.5	5	0.8	V _{IN}	20	3.3 to 5	6.1	6.9	14 Ld SOIC, 16 Ld QFN
ISL6526A	Y	Single Synchronous Buck Pulse-Width Modulation (PWM) Controller	2.5	5	0.8	V _{IN}	20	3.3 to 5	6.1	6.9	14 Ld SOIC, 16 Ld QFN
ISL6527	Y	Single Synchronous Buck Pulse-Width Modulation (PWM) Controller	2.5	5	0.8	V _{IN}	20	3.3 to 5	2.6	3.3	14 Ld SOIC, 16 Ld QFN
ISL6527A	Y	Single Synchronous Buck Pulse-Width Modulation (PWM) Controller	2.5	5	0.8	V _{IN}	20	3.3 to 5	2.6	3.3	14 Ld SOIC, 16 Ld QFN
ISL6540A	Y	Single-Phase Buck PWM Controller with Integrated High Speed MOSFET Driver and Pre-Biased Load Capability	3.3	20	0.6	V _{IN}	30				28 Ld QFN
HIP6006	Y	Buck and Synchronous-Rectifier Pulse-Width Modulator (PWM) Controller	2.5	12	1.3	V _{IN}	25	12		5	14 Ld SOIC, 14 Ld TSSOP
HIP6012	Y	Buck and Synchronous-Rectifier Pulse-Width Modulator (PWM) Controller	2.5	12	1.3	V _{IN}	25	12		5	14 Ld SOIC, 14 Ld TSSOP
ISL6535	Y	Synchronous Buck Pulse-Width Modulator (PWM) Controller	1.2	12	0.6	5	30	8 to 12		51	14 Ld SOIC, 16 Ld QFN
ISL6545	Y	5V or 12V Single Synchronous Buck Pulse-Width Modulation (PWM) Controller	1	12	0.6	5	25	5, 12		3.2	10 Ld DFN, 8 Ld SOIC
ISL6545A	Y	5V or 12V Single Synchronous Buck Pulse-Width Modulation (PWM) Controller	1	12	0.6	5	25	5, 12		3.2	10 Ld DFN, 8 Ld SOIC
ISL8104	Y	Synchronous Buck Pulse-Width Modulator (PWM) Controller	1.2	12	0.6	5	30	8 to 12		51	14 Ld SOIC, 16 Ld QFN
ISL8105	Y	1V to 12V Single-Phase Synchronous Buck Converter PWM Controller with Integrated MOSFET Gate Drivers	1	12	0.6	5	25	5, 12		3.2	10 Ld DFN, 8 Ld SOIC
ISL8105A	Y	1V to 12V Single-Phase Synchronous Buck Converter PWM Controller with Integrated MOSFET Gate Drivers	1	12	0.6	5	25	5, 12		3.2	10 Ld DFN, 8 Ld SOIC
ISL8105B		+5V or +12V Single-Phase Synchronous Buck Converter PWM Controller with Integrated MOSFET Gate Drivers, Extended Soft-Start Time	1	12	0.6	5	25	5, 12		3.2	10 Ld DFN, 8 Ld SOIC
ISL8106	Y	Wide V _{IN} , 7V to 25V, Single-Phase PWM Controller with Integrated MOSFET Drivers	7	25	0.6	3.3	12	N/A (Internal)	2		16 Ld QFN
ISL8107		Single-Phase Pulse-Width Modulation (PWM) Controller with Wide (9V-75V) V _{IN} Range	9	75	1.2	75	10	N/A (Internal)		2	16 Ld QFN
ISL8118		3.3V to 20V Single-Phase PWM Controller with Integrated 2A/4A MOSFET Drivers	3.3	20	0.6	V _{IN}	30				28 Ld QFN
ISL6341	Y	5V or 12V Single Synchronous Buck Pulse-Width Modulation (PWM) Controller	1.5	12	0.8	V _{IN}		4.5 to 14.4	6.4		10 Ld TDFN
ISL6341A	Y	5V or 12V Single Synchronous Buck Pulse-Width Modulation (PWM) Controller	1.5	12	0.8	V _{IN}		4.5 to 14.4	6.4		10 Ld TDFN
ISL6341B		5V or 12V Single Synchronous Buck Pulse-Width Modulation (PWM) Controller	1.5	12	0.8	V _{IN}		4.5 to 14.4	6.4		10 Ld TDFN

Standard Buck

Device	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	V _{BIAS} (V)	I _S (typ) (mA)	Package
HIP6007	Buck Pulse-Width Modulator (PWM) Controller	2.5	12	1.27	V _{IN}	25	12	5	14 Ld SOIC
HIP6013	Buck Pulse-Width Modulator (PWM) Controller	2.5	12	1.27	V _{IN}	25	12	5	14 Ld SOIC

Synchronous Buck (VID)

Device	Device Description	Input Voltage	Output Voltage	Max Output Current	Switching Freq.	IC Bias Voltage	Bias Supply Current	Lead Count	Reference Voltage	Package
ISL6218	Single Phase IMVP-IV Controller for Intel Pentium M	5.6 to 25	License Required for Additional Data	License Required for Additional Data	License Required for Additional Data	License Required for Additional Data	License Required for Additional Data	38	License Required for Additional Data	38 Ld TSSOP, 40 Ld QFN

Device	Device Description	V _{IN} (min) (V)	V _{IN} (max) (V)	V _{OUT} (min) (V)	V _{OUT} (max) (V)	I _{OUT} (max) (A)	V _{BIAS} (V)	VRM	Package
HIP6004B	Buck and Synchronous-Rectifier (PWM) Controller and Output Voltage Monitor HIP6004B	5	12	1.3	3.5	20	12	8.4	20 Ld QFN, 20 Ld SOIC, 20 Ld TSSOP
HIP6004D	Buck and Synchronous-Rectifier (PWM) Controller and Output Voltage Monitor HIP6004D	5	12	1.1	1.85	20	12	9	20 Ld QFN, 20 Ld SOIC
HIP6004E	Buck and Synchronous-Rectifier (PWM) Controller and Output Voltage Monitor	5	12	1.05	1.825	20	12	8.5	20 Ld SOIC, 20 Ld TSSOP

White LED Drivers

Device	Device Description	Topologies	I _{OUT} (max) (mA)	Peak Efficiency (%)	V _{IN} (V)	V _{OUT} (max) (V)	Frequency (MHz)	I _S (max) (mA)	I _q (max) (μA)	I _{sw} (typ) (mA)	Integrated Diode	OVP	Package
ISL97701	Boost Regulator with Integrated Schottky and Input Disconnect Switch	Inductor Boost	130	87	2.3 to 5.5	28	1	1	1	1200	Y	Y	10 Ld DFN
ISL97702	Boost Regulator with Dual Feedback Paths and Output Disconnect for Passive OLED Power Applications	Inductor Boost	130	87	2.3 to 5.5	28	1	1	1	1200	Y	Y	10 Ld DFN

Device	Device Description	Topologies	Number of LEDs (max)	# of Channels	Digital Interface	For LCD Size	I _{OUT} (max) (mA)	Peak Efficiency (%)	V _{IN} (V)	V _{OUT} (max) (V)	Frequency (MHz)	I _S (max) (mA)	I _q (max) (μA)	I _{sw} (typ) (mA)	Integrated Diode	OVP	Fault Switch	Brightness Control	Package
EL7513	12 LEDs Driver (4S3P)	Inductor Boost	12	1	N	3.5 to 4.3	75	91	2.6 to 13.2	18	1	1.5	1	500	N	Y	N	DC or PWM	8 Ld MSOP, 8 Ld TSOT
EL7630	6 LEDs Driver	Inductor Boost	6	1	N	1.8 to 3.5	30	86	2.7 to 5.5	27	1.35	1	1	350	N	N	N	PWM	5 Ld TSOT, 6 Ld SC-70
ISL97631	6 LEDs Driver with Integrated Schottky Diode with OVP	Inductor Boost	7	1	N	1.8 to 3.5	30	85	2.7 to 5.5	27	1.35	1	1	350	Y	N	N	PWM	6 Ld TSOT
ISL97632	White LED Driver with Digital Dimming	Inductor Boost	7	1	Single Wire	1.8 to 3.5	40	85	2.7 to 5.5	27	1.4	1	1	470	Y	Y	Y	Digital 5-Bit Dimming	8 Ld TDFN T+R
ISL97634	White LED Driver with PWM Dimming	Inductor Boost	7	1	N	1.8 to 3.5	40	85	2.7 to 5.5	27	1.4	1	1	470	Y	Y	Y	PWM up to 20kHz	8 Ld TDFN T+R

White LED Drivers (Continued)

Device	Device Description	Topologies	Number of LEDs (max)	# of Channels	Digital Interface	For LCD Size	I _{OUT} (max) (mA)	Peak Efficiency (%)	V _{IN} (V)	V _{OUT} (max) (V)	Frequency (MHz)	I _S (max) (mA)	I _q (max) (μA)	I _{SW} (typ) (mA)	Integrated Diode	OVP	Fault Switch	Brightness Control	Package
ISL97635	SMBus 8-Channel LED Driver	Inductor Boost	80	8	SMBus/I ² C	up to 17	280	91	6 to 24	34.5	0.6/1.2	10	20	2400	N	Y	Y	SMBus, PWM or DC	24 Ld QFN
ISL97635A	SMBus 6-Channel LED Driver	Inductor Boost	60	8	SMBus/I ² C	up to 17	210	91	6 to 24	34.5	0.6/1.2	10	20	2400	N	Y	Y	SMBus, PWM or DC	24 Ld QFN
ISL97801	High Power LED Driver	Inductor Boost or Buck	8	1	N	3.5 to 9	1000	90	2.7 to 16	31	1	3.5	2.5	3600	N	Y	Y	DC or PWM	20 Ld QFN

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