

Intersil Solutions for Military Products

Product Selection Guide - April 2008



Intersil's New VID Offering

Intersil has initiated a Vendor Item Drawing (VID) compliance program intended to offer value-added, cost-effective solutions to military, aerospace and other harsh-environment customers who believe that an extended temperature plastic packaged part is suitable for their particular application. Intersil's VID offering is a market driven strategy, that brings a broad range of Intersil's newest high performance analog, digital and power management products to the high reliability marketplace. The VID program is recognized by DSCC (Defense Supply Center Columbus), with DSCC generated part numbers which will also be available on their web site:

www.dsccl.dla.mil/Programs/MilSpec/listdwgs.asp?DocTYPE=VID

VID products offer an alternative to up-screening for customers that need performance above and beyond the standard limits of commercial grade components. Intersil's VID

products receive additional verification and/or screening vs their commercial counterparts. VID products are not MIL-PRF-38535 (QML) qualified, and hence may not be suitable for all end applications and environments. For applications that need a ceramic/hermetic packaged component and/or QML screening, Intersil continues to offer a broad range of military and Hi-Rel products. These products can be found within the Product Selection Guide under the Mil/Hi-Rel product section: www.intersil.com/design/psg/Military_Space.pdf





Salient Features of Intersil's VID Offering

Enhanced Lot Combination and Traceability Practices

- Full homogenous lot process in wafer fab
- No combination of wafer fabrication lots in assembly
- Full traceability through assembly and test by date/trace code assignment

Enhanced Obsolescence Management

Notifications provided 18 months in advance of product obsolescence with the following provisions:

- Up to 12 months from the notice date the customer may place purchase orders for end of life buys
- Up to 6 months from the end of the end of life buy date and 18 months from the notice date shipments may be made to the customer

Full Mil-Temp Electrical Performance

Controlled Baseline for Enhanced Homogeneity

- One wafer fabrication site
- One assembly site

Plastic Encapsulated Package

Eliminates need for Up-Screening a COTS Component

Enhanced PCN (Process Change Notification)

Change Notification is per MIL-PRF-38535 with a 90 days advance notice (Notification only)

- Intersil provides an opportunity for end of life purchase for all Form, Fit, or Function changes

• Eliminate extra logistics, product/drawing maintenance and device testing

- Remove need to add excess guard band for unknown lot to lot performance variability
- Reduce concerns about reliability from extended temp use
- Electro-migration and current density validated for extended temperature use

Reduced Cost vs. QML/Class-Q SMD (Standard Microcircuit Drawing) Products

Intersil Defined Process Flow

Standard VID (V62/xxxxx) Datasheet Available on DSCC Website:

<http://www.dscclia.mil/Programs/MilSpec/listdwgs.asp?DocTYPE=VID>

Intersil's New VID Selection Chart

Intersil's first VID products include power management and general purpose analog solutions. Please contact your local sales office for samples, pricing, and availability.

Single-Ended, Peak Current Mode PWM Controllers with 3% Current Limit

Device Number	VID#	Rising UVLO (V)	Falling UVLO (V)	Max V _{BIAS} (V)	Operating Current (mA)	Max I _{OUT} (A)	Max Duty-cycle (%)	Target Application
ISL8840AMBEP	V62/07621-01XB	7	6.6	30	2.9	1	100	Boost, Flyback and Forward DC-DC Converters
ISL8841AMBEP	V62/07621-02XB	7	6.6	30	2.9	1	50	Boost, Flyback and Forward DC-DC Converters
ISL8842AMBEP	V62/07621-03XB	14.3	8.8	30	2.9	1	100	Off-line Boost, Flyback and Forward DC-DC Converters
ISL8843AMBEP	V62/07621-04XB	8.4	7.6	30	2.9	1	100	Boost, Flyback and Forward DC-DC Converters
ISL8844AMBEP	V62/07621-05XB	14.3	8.8	30	2.9	1	50	Off-line Boost, Flyback and Forward DC-DC Converters
ISL8845AMBEP	V62/07621-06XB	8.4	7.6	30	2.9	1	50	Boost, Flyback and Forward DC-DC Converters

Single, Synchronous Buck PWM Controllers

Device Number	Min V _{IN} (V)	Max V _{IN} (V)	Min V _{OUT} (V)	Max V _{OUT} (V)	Max I _{OUT} (A)	V _{BIAS} (V)	Target Application
ISL6403MREP	3.3	5.5	0.8	5.5	2.0	5.3 to 5.5	POB Buck Converters
ISL64203MAEP	4.5	21	0.6	4.0 to 5.5	2.0	5	POB Buck Converters

Dual Synchronous Integrated FET Buck Regulator

Device Number	Min V _{IN} (V)	Max V _{IN} (V)	Min V _{OUT} (V)	Max V _{OUT} (V)	Max I _{OUT} (A)	Switching Frequency (MHz)	Target Application
ISL65426MREP	2.5	5.5	1.0	3.3	6 (125C J)	1	FPGA/CPLD/DSP

Dual, Low Noise LDO

Device Number	Min V _{IN} (V)	Max V _{IN} (V)	I _{OUT} (mA)	Dropout (mA)	Min PSRR (dB)	Noise Level (μVrms)	Target Application
ISL9000AMRNCEP	2.3	6.5	300	200	90	30	Low Noise Supplies

60V Buck Regulator with Integrated FET

Device Number	Min V _{IN} (V)	Max V _{IN} (V)	Min V _{OUT} (V)	Max V _{OUT} (V)	Max I _{OUT} (A)	Switching Frequency (kHz)	Target Application
ISL8560MREP	9	60	1.2	55	2	100-600	Non-Isolated Supplies

Single Supply, I²C Interface, 128-tap DCP

Device Number	Min V _{IN} (V)	Max V _{IN} (V)	Shutdown Current (μA)	Wiper Resistance (Ω)	Total Resistance (kΩ)	Target Application
ISL22316WMUEP ISL22326WMVEP ISL22346WMVEP	2.7	5.5	5	70	10	General Purpose Analog



Intersil plans to expand VID offering of commercially available products that have key differentiators applicable to Hi-Rel market. These new product areas include Interface, MOSFET Drivers, Real Time Clocks, and Video.

Potential VID Version of Commercial Products

Product Family	Potential Products
Interface	ISL3179: 3V RS-485 Transceiver, 1/2 Duplex, 32 Mbps ISL3159: 3V RS-485 Transceiver, 1/2 Duplex, 40 Mbps
Low Side Drivers	EL7202: Hi-speed Dual, Non-inverting Power MOSFET Drivers EL7212: Hi-speed Dual, Inverting Power MOSFET Drivers EL7222: Hi-speed Dual, complementary Power MOSFET Drivers
Real Time Clocks	ISL12027/8/9: Real Time Clock/Calendar with EEPROM
Buffered Crosspoint Switches	ISL59532: 32x32 Video Crosspoint ISL59533: 32x32 Video Crosspoint with Differential Inputs
Video Drivers	ISL59830A: True Single Supply Video Driver With Power Down ISL59112: 40MHz Rail-to-Rail Video Buffer ISL59115: Triple Channel Video Driver with LPF
Delay Lines	EL9115: Triple Analog Video Delay Line
Muxes	ISL43681: Low-Voltage, Single and Dual Supply, 8 to 1 Multiplexer ISL43741: Low-Voltage, Single and Dual Supply, Differential 4 to 1 Multiplexer
Sync Separators	EL4583A: Sync Separator, 50% Slice, S-H, Filter, H _{OUT} ISL59885: Auto-Adjusting Sync Separator for HD and SD Video
Voltage References	ISL21007: Precision, Low Noise FGA™ Voltage References ISL21009: High Voltage Input Precision, Low Noise FGA™ Voltage References
Precision Op Amps	ISL28156/8: 34µA Micro-power Single Precision Rail-to-Rail Input-Output (RRIO) Low Input Bias Current Op Amps
Bridge Drivers	ISL2100A/01A: 100V, 2A Peak, High Frequency Half-Bridge Drivers



Newly Released Military SMD Products

Intersil has a strong heritage of supplying memory, microprocessor peripherals and analog products to the Hi-Rel marketplace for over 35 years. Intersil continues to develop new SMD products that are offered in hermetic packages and with guaranteed performance over a -55°C to +125°C temperature range. SMD products are MIL-PRF-38535 compliant and are 100% burned in.



The following Military SMD RS-232 transceiver products were recently released.

3V and 5V RS-232 Interface Products with 15kV HBM ESD

Commercial Part# Equivalent	SMD#	Package	Configuraton
5V Devices			
ICL3243E	5962-0620701Q3A	28 Ld CLCC	3Tx/5Rx
ICL3238E	5962-0620702Q3A	28 Ld CLCC	5Tx/3Rx
ICL3232E	5962-0620703Q2A	20 Ld CLCC	2Tx/2Rx
ICL3221E	5962-0620704Q2A	20 Ld CLCC	1Tx/1Rx
3V Devices			
ICL3243E	5962-0620705Q3A	28 Ld CLCC	3Tx/5Rx
ICL3238E	5962-0620706Q3A	28 Ld CLCC	5Tx/3Rx
ICL3232E	5962-0620707Q2A	20 Ld CLCC	2Tx/2Rx
ICL3221E	5962-0620708Q2A	20 Ld CLCC	1Tx/1Rx

Contact your local sales office for availability of these new high speed Op Amps.

New High Speed Op Amp Products

Commercial Part# Equivalent	SMD #	Package	Description
EL8102	5962-0623501QPC	8 Ld SideBrazed DIP	Single, 500MHz Rail-to-rail Op Amp with Enable
EL8103	5962-0623502QPC	8 Ld SideBrazed DIP	Single, 500MHz Rail-to-rail Op Amp
EL5132	5962-0623601QPC	8 Ld SideBrazed DIP	Single, 650MHz $A_V = 10$ Low Noise VFA with Enable
EL5133	5962-0623602QPC	8 Ld SideBrazed DIP	Single, 650MHz $A_V = 10$ Low Noise VFA
EL5106	5962-0625501QXC	10 Ld Flatpack	Single, 300MHz FGAA _O = $\pm 1, 2$, with Enable
EL5166	5962-0625601QXC	10 Ld Flatpack	Single, 1.2GHz CFA with Enable
EL5167	5962-0625602QXC	10 Ld Flatpack	Single, 1.2GHz CFA
EL8108	5962-0721201QXC	10 Ld Flatpack	Video Distribution Amplifier
EL8202	5962-0721301QXC	10 Ld Flatpack	Dual, 500MHz Rail-to-rail Op Amp with Enable
EL8203	5962-0721302QXC	10 Ld Flatpack	Dual, 500MHz Rail-to-rail Op Amp
EL8403	5962-0721303QYC	14 Ld Flatpack	Quad, 500MHz Rail-to-rail Op Amp

Mil compliant packages per MIL-STD-1835

<http://www.dscc.dla.mil/Downloads/MilSpec/Docs/MIL-STD-1835/std1835.pdf>

Military IC Selection Guide

These new SMD offerings are representative of Intersil's ability to bring its latest high performance analog offerings to the Military marketplace. If you have other Intersil COTS products that you would like to see in VID or SMD please contact your local Intersil sales office.

DSCC SMD (Non-Rad hard)

Auxiliary Output

Device	Device Description	Package
5962M95A0501QXA	SMD Version Auxiliary Output Chip	40 Ld LCC
5962M95A0501QYA	SMD Version Auxiliary Output Chip	28 Ld SBDIP

EEPROM

Device	Device Description	Package
5962-3826701MXAC7200	128K EEPROM MIL-STD-883, 250ns	32 Ld CerDIP
5962-3826705MXAC7200	128K x 8 EEPROM, CMOS, MIL-STD-883, 150ns	32 Ld CerDIP
5962-3826707MXAC7200	128K x 8 EEPROM, MIL-STD-883C, 120ns	32 Ld CerDIP
5962-8863401XAC6833	32K x 8 EEPROM, High Speed, MIL-STD-883, 120ns	28 Ld CerDIP
5962-8863401ZCC6833	32K x 8-Bit, CMOS EEPROM, High Speed, MILSTD-883, 120ns	28 Ld FlatPack
5962-8863403XAC6833	32K x 8 EEPROM, High Speed CMOS, MIL-STD-883, 90ns	28 Ld CerDIP
5962-9086901MYAC7060	64K x 8 EEPROM CMOS, MIL-STD-883, 250ns	LCC
5962-9086902MYAC7068	64K x 8 EEPROM, CMOS, MIL-STD-883, 250ns	LCC
5962-9086903MXAC7060	64K x 8 EEPROM, CMOS, MIL-STD-883, 200ns	32 Ld CerDIP
5962-9086905MXAC7060	64K x 8, CMOS, EEPROM, MIL-STD-883, 150ns	32 Ld CerDIP
5962-9086906MXAC7068	64K x 8 EEPROM, CMOS, MIL-STD-883, 150ns	32 Ld CerDIP
5962-9086906MYAC7068	64K x 8 EEPROM, CMOS, MIL-STD-883, 150ns	LCC
5962-9086907MXAC7060	64K x 8 CMOS, EEPROM, MIL-STD-883, 120ns	32 Ld CerDIP
5962-9086908MYAC7068	64K x 8 EEPROM, CMOS, 120ns	LCC

Interface

Device	# of Tx	# of Rx	High ESD	Manual Shutdown	Auto Shutdown	Rx Disable	Data Rate (kbps)	Cap. Value (μF)	I _S Enabled (mA)	I _S Disabled (μA)	V _{CC} Range (+V)	Package
5962-0620701Q3A	3	5	Yes	Yes	Basic	No	500	0.1	0.3	1	3 to 5.5	28 Ld CLCC
5962-0620702Q3A	5	3	Yes	Yes	Enhanced	No	500	0.1	0.3	0.01	3 to 5.5	28 Ld CLCC
5962-0620703Q2A	2	2	Yes	No	No	No	500	0.1	0.3	N/A	3 to 5.5	20 Ld CLCC
5962-0620704Q2A	1	1	Yes	Yes	Basic	Yes	500	0.1	0.3	1	3 to 5.5	20 Ld CLCC
5962-0620705Q3A	3	5	Yes	Yes	Basic	No	500	0.1	0.3	1	3 to 5.5	28 Ld CLCC
5962-0620706Q3A	5	3	Yes	Yes	Enhanced	No	500	0.1	0.3	0.01	3 to 5.5	28 Ld CLCC
5962-0620707Q2A	2	2	Yes	No	No	No	500	0.1	0.3	N/A	3 to 5.5	20 Ld CLCC
5962-0620708Q2A	1	1	Yes	Yes	Basic	Yes	500	0.1	0.3	1	3 to 5.5	20 Ld CLCC

Multiplexers/Switch

Device	Switch or MUX	Config./ # of Switches	Type of Switch	Special Features	R _{DS(on)} (Ω)	T _{ON} (ns)	T _{OFF} (ns)	CHG INJ (pC)	Leakage (nA)	SRC Cap (pF)	DRN Cap (ON) (pF)	I _S (mA)	Package
DG201A/883	Switch	2	SPST	Latch Proof	115	480	370	20	100	5	5	0.9	16 Ld CerDIP
DG411/883	Switch	NC/4	SPST	Low R _{ON}	25	110	100	5	0.1	9	35	0.1	16 Ld CerDIP
HI-5043/883	Switch	NB/2	SPDT	Low R _{ON} , R _{ON} Matching	50	370	280	50	0.8	11	11	0.1	20 Ld CerDIP
HI-506/883	MUX	16x1	-	Active OV Protection	180	250	250	15	0.3	10	52	1.5	28 Ld CerDIP
HI-509/883	MUX	Dual 4x1	-	Differential Config	180	250	250	15	0.3	10	12	1.5	20 Ld LCC

DSCC SMD (Non-Rad hard) - Continued

Operational Amplifiers

Device	# of Amps	BW @ -3dB (MHz)	Slew Rate (V/μs)	V _S (min) (V)	V _S (max) (V)	V _N (nV/√Hz)	Rail-to-Rail	Gain A _V (min)	I _S (per amp) (mA)	I _{BIAS} (μA)	V _{OS} (max) (mV)	AVOL or AZOL (dB or V/mV)	CMRR (dB)	PSRR (dB)	Package
HA-5190	1	150	200	±10	±15	6	N	5	19	5	3	-	74	70	20 Ld LCC
HA-2539	1	600	600	±5	±15	6	N	10	20	5	8	8.3	70	70	14 Ld PDIP
HA-5104	4	8	3	5	18	4.3	N	1	5	130	0.5	108	95	100	14 Ld CerDIP, 16 Ld SOIC, 20 Ld LCC
HA-2544	1	45	150	±8	±15	20	N	1	10	9000	15	76	89	80	8 Ld Can
HA-5102	2	8	3	5	18	4.3	N	1	3	130	0.5	108	95	100	8 Ld Can, 8 Ld CerDIP
HA-5020	1	100	1100	±4.5	±18	4.5	N	1	7.5	3	8	55	-	-	20 Ld LCC, 8 Ld PDIP, 8 Ld SOIC
HA-2520	1	20	120	±8	±18	-	N	3	4	100	4	84	90	90	8 Ld Can, 8 Ld CerDIP
HFA1130	1	850	2300	±4.5	±5.5	4	N	1	21	12	6	300	46	50	20 Ld LCC, 8 Ld SOIC

Device	# of Amps	Min# Gain	Special Features	BW (MHz)	I _S /Amp (mA)	V _{CC} Range (±V)	Package
HA-2400/883	4x1	10	4:1 MUX with Op Amp Output	40	4.8	10 to 20	16 Ld CerDIP
HA-2539/883	1	10	Low Noise	600	20	5 to 15	14 Ld CerDIP
HA-5104/883	4	1	Low Noise, Precision	8	5	5 to 18	14 Ld CerDIP
HA-5101/883	1	1	Low Noise	10	4	5 to 18	20 Ld LCC, 8 Ld CerDIP
HA-2520/883	1	3	High R _{IN}	20	4	8 to 18	8 Ld Can

Device	Device Description	Package
5962-0623501QPC	500MHz Rail-to-Rail Amplifier	8 Ld SBDIP
5962-0623502QPC	500MHz Rail-to-Rail Amplifier	8 Ld SBDIP
5962-0623601QPC	670MHz Low Noise Amplifiers	8 Ld SBDIP
5962-0623602QPC	670MHz Low Noise Amplifiers	8 Ld SBDIP
5962-0625501QXC	350MHz Fixed Gain Amplifiers with Enable	10 Ld FlatPack
5962-0625601QHC	1.4GHz Current Feedback Amplifiers with Enable	10 Ld FlatPack
5962-0625601QXC	1.4GHz Current Feedback Amplifiers with Enable	10 Ld FlatPack
5962-0625602QHC	1.4GHz Current Feedback Amplifiers with Enable	10 Ld FlatPack
5962-0625602QXC	1.4GHz Current Feedback Amplifiers with Enable	10 Ld FlatPack
5962-0721201QXC	Video Distribution Amplifier	10 Ld FlatPack
5962-0721301QHC	Dual 500MHz Rail-to-Rail Amplifier with Enable	10 Ld FlatPack
5962-0721301QXC	500MHz Rail-to-Rail Amplifiers	10 Ld FlatPack
5962-0721302QHC	Dual 500MHz Rail-to-Rail Amplifier	10 Ld FlatPack
5962-0721302QXC	500MHz Rail-to-Rail Amplifiers	10 Ld FlatPack
5962-0721303QDC	Quad 500MHz Rail-to-Rail Amplifier	14 Ld FlatPack
5962-0721303QYC	500MHz Rail-to-Rail Amplifiers	14 Ld FlatPack

Buffers

Device	# of Amps	BW @ -3dB (MHz)	Slew Rate (V/μs)	Gain A _V (min)	V _{IN} (min) (V)	V _{IN} (max) (V)	I _{BIAS} (μA)	I _S (mA)	CMRR (dB)	PSRR (dB)	V _{OS} (max) (mV)	Rail-to-Rail	Package
HA-5002/883	1	110	1300	1	±5	±20	2	8.3	-	64	5	N	20 Ld LCC, 8 Ld Can, 8 Ld CerDIP

Standard /883

Switches

Device	Config./ # of Switches	Type of Switch	$R_{DS(on)}$ (Ω)	T_{ON} (ns)	T_{OFF} (ns)	CHG INJ (pC)	Leakage (nA)	SRC Cap (pF)	DRN Cap (ON) (pF)	I_S (mA)	Package
HI-200/883	NC / 2	SPST	55	240	500	35	1	5.5	5.5	0.5	10 Ld Can, 14 Ld CerDIP
HI-201/883	NC / 4	SPST	55	185	220	10	2	5.5	5.5	0.5	16 Ld CerDIP, 20 Ld LCC
HI-201HS/883	NC / 4	SPST	30	30	40	10	0.3	10	10	4.5	16 Ld CerDIP, 20 Ld LCC
HI-303/883	NB / 2	SPDT	35	210	160	30	0.04	16	35	0.09	14 Ld CerDIP
HI-5046A/883	NO / 1	DPDT	25	370	280	50	0.8	11	11	0.1	16 Ld CerDIP
HI-5051/883	NB / 2	SPDT	25	370	280	50	0.8	11	11	0.1	20 Ld CLCC, 20 Ld LCC

Multiplexers

Device	Config./ # of Switches	Type of Switch	$R_{DS(on)}$ (Ω)	T_{ON} (ns)	T_{OFF} (ns)	CHG INJ (pC)	Leakage (nA)	SRC Cap (pF)	DRN Cap (ON) (pF)	I_S (mA)	Package
HI-508/883	8x1	N/A	180	250	250	15	0.3	10	17	1.5	16 Ld CerDIP, 16 Ld SBDIP
HI-546/883	16x1	N/A	1500	300	300	4	0.1	10	52	0.5	28 Ld CerDIP, 28 Ld LCC
HI-547/883	Dual 8x1	N/A	1500	300	300	4	0.1	10	30	0.5	28 Ld CerDIP, 28 Ld LCC
HI-548/883	8x1	N/A	1500	300	300	4	0.1	10	25	0.5	16 Ld CerDIP, 20 Ld LCC
HI-549/883	Dual 4x1	N/A	1200	300	300	4	0.1	10	12	0.5	16 Ld CerDIP

Operational Amplifiers

Device	# of Amps	PW @ 3dB (MHz)	V_S (min) (V)	V_S (max) (V)	Gain (min) (V)	I_S (per amp) (mA)	I_{BIAS} (μ A)	Package
HA-2400/883	1	12	± 1	± 20	1	4	25	8 Ld Can, 8 Ld CerDIP

Device	# of Amps	Min# Gain	Special Features	BW (MHz)	I_S /Amp (mA)	V_{CC} Range ($\pm V$)	Package
HA-2400/883	4x1	10	4:1 MUX with Op Amp Output	40	4.8	10 to 20	16 Ld CerDIP
HA-2520/883	1	3	High R_{IN}	20	4	8 to 18	8 Ld Can
HA-2539/883	1	10	Low Noise	600	20	5 to 15	14 Ld CerDIP, 20 Ld LCC
HA-4741/883	4	1	5	3.5	5	2 to 20	14 Ld CerDIP, 20 Ld LCC
HA-5101/883	1	1	Low Noise	10	4	5 to 18	8 Ld CerDIP, 20 Ld LCC
HA-5104/883	4	1	Low Noise, Precision	8	5	5 to 18	14 Ld CerDIP
HA-5127/883	1	1	Low Noise, Precision	8.5	3.5	5 to 20	8 Ld Can

Buffers

Device	# of Amps	Min# Gain	Special Features	BW (MHz)	I_S /Amp (mA)	V_{CC} Range ($\pm V$)	Package
HA-5002/883	1	1	Video, High R_{IN} , Open Loop, High I_{OUT}	110	8.3	5 to 20	8 Ld Can, 8 Ld CerDIP, 20 Ld LCC

Standard /883 - Continued

Comparators

Device	Device Description	I _S /Amp (mA)	V _{CC} Range (±V)	Package
HA-4902/883	Precision Quad Comparators	6.5	2.5 to 15	16 Ld CerDIP, 20 Ld LCC

Micro + Peripherals

Device	Device Description	Features	Data Frame Length	Data Rate	Package
80C286/883	High Performance Microprocessor with Memory Management and Protection	• Compatible with NMOS 80286 • Static CMOS Design for Low Power Operation • Wide Operating Temperature Range	N/A	N/A	68 Ld PGA
80C86/883	CMOS 16-Bit Microprocessor	• Compatible with NMOS 8086 • Static CMOS Design for Low Power Operation • Wide Operating Temperature Range	N/A	N/A	40 Ld CerDIP
80C88/883	CMOS 8-Bit/16-Bit Microprocessor	• Compatible with NMOS 8088 • Static CMOS Design for Low Power Operation • Wide Operating Temperature Range	N/A	N/A	40 Ld CerDIP
HD-4702/883	CMOS Programmable Bit Rate Generator	• Low Power Dissipation • Conforms to EIA RS-404	N/A	N/A	16 Ld CerDIP
HD-6402/883	CMOS Universal Asynchronous Receiver Transmitter (UART)	• Low Power CMOS Design • Programmable Word Length, Stop Bits and Parity	Variable	500kBit/s	40 Ld CerDIP
HD-6409/883	CMOS Manchester Encoder-Decoder	• Independent Encoder and Decoder • No DC Component Allowing Transformer Coupling • High Noise Immunity	Complete Variable	1MBit/s	20 Ld CerDIP

D/A Converters

Device	Device Description	Package
HI-565A/883	High Speed, Monolithic D/A Converter with Reference	24 Ld SBDIP

A/D Converters

Device	Device Description	Package
HI-674A/883	Complete, 12-Bit A/D Converters with Microprocessor Interface	28 Ld SBDIP

RAM

Device	Device Description	Package
HM-6514/883	1024x4 CMOS RAM	18 Ld CerDIP
HM-6514B/883	1024x4 CMOS RAM	18 Ld CerDIP
HM-65162/883	2Kx8 Asynchronous CMOS Static RAM	24 Ld CerDIP
HM-6551/883	256x4 CMOS RAM	22 Ld CerDIP
HM-65642/883	8Kx8 Asynchronous CMOS Static RAM	28 Ld CerDIP
HM-6617/883	2Kx8 CMOS PROM	24 Ld CerDIP, 24 Ld LCC, 24 Ld PDIP
HM-6642/883	512x8 CMOS PROM	24 Ld SBDIP

VID/EP

Digital Potentiometers (DCPs) - Digitally Controlled Potentiometers (DCPs) - Non-Volatile - Single - 128 Tap

Device	Device Description	Package
ISL22316WMUEP	Single Digitally Controlled Potentiometer (XDCP™), Low Noise, Low Power I ² C® Bus, 128 Taps	10 Ld MSOP
ISL22326WMVEP	Dual Digitally Controlled Potentiometers (XDCP™) Low Noise, Low Power, I ² C® Bus, 128 Taps	14 Ld TSSOP
ISL22346WMVEP	Quad Digitally Controlled Potentiometers (XDCP™), Low Noise, Low Power I ² C® Bus, 128 Taps	20 Ld TSSOP

Linear Regulation - Low Power

Device	Device Description	Package
ISL9000AMRNCEP	Dual LDO with Low Noise, Very High PSRR and Low I _Q	10 Ld DFN

PWM Controllers

Device	Device Description	Package
ISL6420BMAEP	Enhanced Product (EP) Advanced Single Synchronous Buck Pulse-Width Modulation (PWM) Controller	20 Ld QSOP
ISL65426MREP	Enhanced Product (EP) 6.0A Dual Synchronous Buck Regulator with Integrated MOSFETs	50 Ld QFN
ISL8840AMBEP	Enhanced Product (EP) High Performance Industry Standard Single-Ended Current Mode PWM Controllers	8 Ld SOIC
ISL8841AMBEP	Enhanced Product (EP) High Performance Industry Standard Single-Ended Current Mode PWM Controllers	8 Ld SOIC
ISL8842AMBEP	Enhanced Product (EP) High Performance Industry Standard Single-Ended Current Mode PWM Controllers	8 Ld SOIC
ISL8843AMBEP	Enhanced Product (EP) High Performance Industry Standard Single-Ended Current Mode PWM Controllers	8 Ld SOIC
ISL8844AMBEP	Enhanced Product (EP) High Performance Industry Standard Single-Ended Current Mode PWM Controllers	8 Ld SOIC
ISL8845AMBEP	Enhanced Product (EP) High Performance Industry Standard Single-Ended Current Mode PWM Controllers	8 Ld SOIC

Switching Regulation - Single Output - Integrated FET DC/DC - Buck

Device	Device Description	Package
ISL8560MREP	DC/DC Power Switching Regulator	20 Ld QFN

MicroP/C

Data Communications

Device	Device Description	Features	Data Frame Length	Data Rate	Package
HD-15530	CMOS Manchester Encoder-Decoder	- Independent Encoder and Decoder - No DC Component Allowing Transformer Coupling - High Noise Immunity	16	1.25MBit/s	24 Ld CerDIP, 8 Ld CerDIP
HD-15531	CMOS Manchester Encoder-Decoder	- Sync Identification and Lock-In - Separate Manchester II Encode, Decode - Low Operating Power 50mW at 5V	32	1.25MBit/s	40 Ld CerDIP
HS-3182	ARINC 429 Bus Interface Line Driver Circuit	- TTL and CMOS Compatible Inputs - Adjustable Rise and Fall Times via Two External Capacitors - Asynchronous Line Driver	N/A	100kBit/s	16 Ld SBDIP, 28 Ld CLCC
HS-3282	CMOS ARINC Bus Interface Circuit	- Asynchronous Receiver - ARINC Specification 429 Compliant - Single 5V Supply	25-Bit or 32-Bit Word	100kBit/s or 12.5kBit/s	40 Ld CerDIP, 44 Ld LCC

Main Offices

NORTH AMERICA

WEST COAST

Intersil Corporation Headquarters
1001 Murphy Ranch Road
Milpitas, CA 95035
TEL: (408) 432-8888
FAX: (408) 434-5351
1-888-INTERSIL
1-888-468-3774

EAST COAST

Intersil Corporation
1650 Robert J Conlan Blvd NE
Palm Bay, FL 32905
TEL: (321) 724-7000
1-888-INTERSIL
1-888-468-3774

EUROPE

Intersil Europe Sarl

Avenue William Fraisse, 3
1006 Lausanne
Switzerland
TEL: +41 21 6140560
FAX: +41 21 6140579

ASIA

ASIA PAC HEADQUARTERS

Intersil China Limited
Suite 1611, 16/F Tower 2
Silvercord, 30
Canton Road,
Tsimshatsui, Kowloon
Hong Kong
TEL: +852 2709 7600
FAX: +852 2724 4369

JAPAN

Intersil K.K.
Queen's Tower A 12F
2-3-1 Minato-Mirai,
Nishi-ku
Yokohama-shi
Kanagawa-ken 220-6012
TEL: +81-45-682-5820
FAX: +81-45-682-5821

Sales Offices

NORTH AMERICA

Alabama

2608 Southhurst Drive
Huntsville, AL 35803
(TEL) 256-882-2702
(FAX) 256-883-8607

California

Intersil Corporation Irvine Office
11 Cushing, Suite 250
Irvine, CA 92618
(TEL) 949-341-7000
(FAX) 949-341-7123

California

Intersil Corporation Headquarters
1001 Murphy Ranch Road
Milpitas, CA 95035
(TEL) (408) 432-8888
(FAX) (408) 434-5351

Florida

1650 Robert J. Conlan Blvd. NE
Palm Bay, FL 32905
(TEL) 321-724-7000
(FAX) 321-729-5320

Illinois

2112 Timber Ridge Lane
Hoffman Estates, IL
60195
(TEL) 847-567-2112
(FAX) 847-202-4857

Intersil Planet-ATE ICs

www.planet-ATE.com
USA: 1-888-468-3774
Japan: 090-9099-4923
China: 021-6101-0056

Massachusetts

161 Worcester Road, Suite 307
Framingham, MA 01701
(TEL) +852-270-6767
(FAX) +852-270-6883

New Jersey

65 Readington Road
North Branch Development Center
North Branch, NJ
08876-3557
(TEL) 908-685-6216
(FAX) 908-685-6140

New York

700 Veterans Memorial Highway
Suite #312
Hauppauge, NY 11788-4365
(TEL) 631-265-4985
(FAX) 631-724-5423

North Carolina

4020 Stirrup Creek Drive
Bldg. 2A, Suite #105,
P.O. Box 13996
Research Triangle Park, NC 27709
(TEL) 919-405-3650
(FAX) 919-405-3651

Oregon

15247 NW Greenbrier Pkwy.
Beaverton OR 97006
(TEL) 503-690-7800
(FAX) 503-690-7818

ASIA

China Technical

Support Hotline
(TEL) 800-820-7963

Bangalore

Intersil Analog Services Pvt. Ltd.,
D4, Mariner Block,
Ascendas - 'The V' IT Park,
Plot # 17, Software Units Layout,
Madhapur, Hyderabad - 500081
(TEL) +91-80-41338400
(FAX) +91-80-41121035

Beijing Office

Intersil China Limited,
Beijing Rep Office
Suite A1901, 18
Beitaipingzhuang Rd,
Haidian District, Beijing 100088, P.R.
China
(TEL) +86-10-8225-5181
(FAX) +86-10-8225-5161

Hong Kong

Suite 1611, 16/F, Tower 2
Silvercord, 30 Canton Road
Tsimshatsui, Kowloon
Hong Kong
(TEL) +852 2709-7600
(FAX) +852-2724-4369

Osaka-Shi

Osaka-Ekimae No. 4 Bldg. 16F 1-104
1-11-4-1600 Umeda, Kita-ku
Osaka-shi, 530-0001 Japan
(TEL) +81-6-6346-9730
(FAX) +81-6-6346-9731

Seoul

#616, Korea City Air Terminal Building
159-6, Samsung-Dong, Kangnam-Ku,
Seoul 135-728, Korea
(TEL) +82-2-5571-0911-4
(FAX) +82-2-551-0910

Shanghai

Suite 3311, 989 Changle Road,
Shanghai 200031
P.R. China
(TEL) +86-21-6335-1198
(FAX) +86-21-6335-1958

Shenzhen

Suite 804, Han Tang Building
Overseas Chinese Town
Shenzhen 518053,
PR China
(TEL) +86-755-8246-5118
(FAX) +86-755-8246-1718

Singapore

Intersil Pte Ltd
290 Orchard Road
#17-10 Paragon
Singapore 238859
(TEL) +65-6748-4200
(FAX) +65-6748-0400

Taegu

15th fl., Allianz Tower, 375
Namsan-Dong, Jung-Ku,
Taegu 700-440, Korea
(TEL) +82-53-600-3313
(FAX) +82-53-600-3314

Taipei

8F-2, No. 96
Chien-Kuo North Road,
Sec.1, Taipei, Taiwan 104
(TEL) +886-2-2515-8508
(FAX) +886-2-2515-8369

Yokohama

12F, Queen's Tower A
2-3-1 Minato-Mirai, Nishi-ku
Yokohama-shi, Kanagawa
220-6012 Japan
(TEL) +81-45-682-5820
(FAX) +81-45-682-5821

EUROPE

France

2 Rue de Marly - 3 eme Etage
78150 Le Chesnay
France
(TEL) +33-1-39-23-81-25
(FAX) +33-1-39-23-81-26

Germany

Oskar-Messter-Str. 29
85737 Ismaning, Germany
(TEL) +49-89-46263-0
(FAX) +49-89-46263-133

Intersil S.A.

rue Wiertz 50/28
1050 Bruxelles
Belgique
(TEL) +32-15-347-440

Intersil SA

Svärdvägen 21
Box 570
SE-182 15 Danderyd
Sweden
(TEL) +46 8 753 59 97

Intersil SRL

Via Manzoni 44
20095 Cusano Milanino
Milano, Italy
(TEL) +39-02-36567330
(FAX) +39-02-36564616

Switzerland

Avenue William Fraisse 3
1006 Lausanne, Switzerland
(TEL) +41-21-61405-60
(FAX) +41-21-61405-79

United Kingdom

Riverside Way - Watchmoor Park
Camberley - Surrey GU15 3YQ,
United Kingdom
(TEL) +44-1276-586883
(FAX) +44-1276-823231



www.intersil.com

1001 Murphy Ranch Road,
Milpitas, CA 95035
North America 1-888-INTERSIL
International (01) 1-321-724-7143