

Carrier User Manual

Revision History:

Rev 1.1 10.09.2013 Added Table 1:Connectors
Rev 1.2 18.09.2014 Added Table 17:IPMB
Rev 1.3 17.12.2014 Update connector PN
Rev 1.4 1.5.2017 Add figure 3, IPMB connector
Rev 1.5 18.6.2020 Update figure 2
Rev 1.6 9.7.2020 Update table 12

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1 Mechanical Drawing

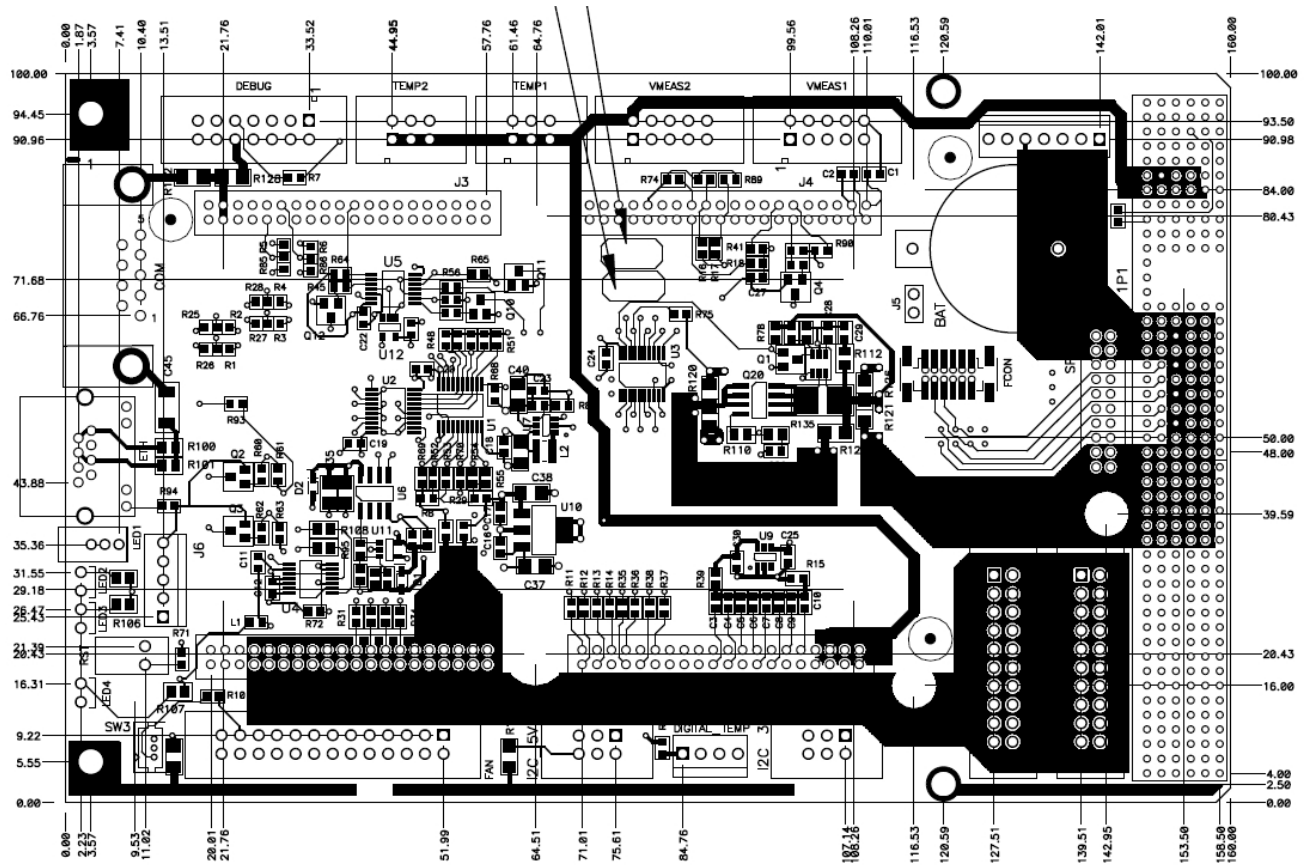


Figure 1: PCB Dimensions

2 Layout / Position of the connectors

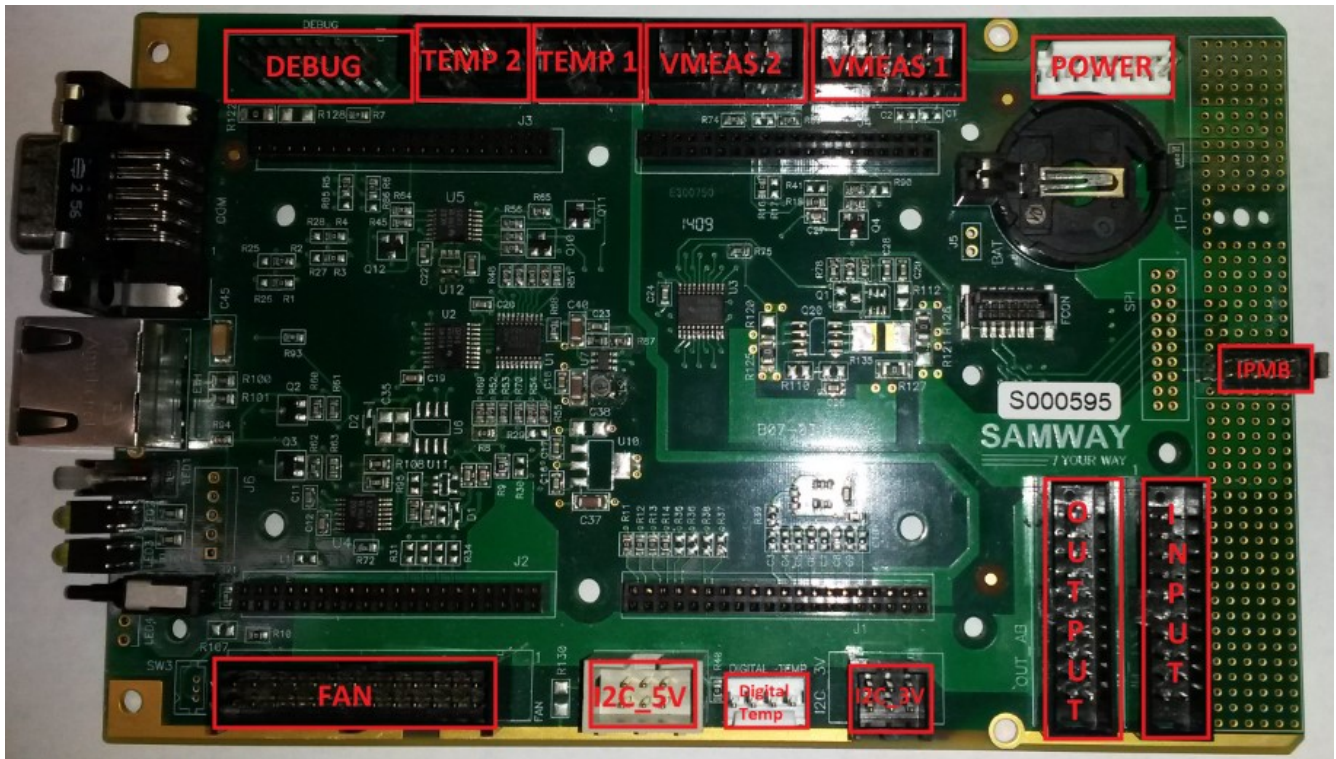


Figure 2: Connector Positions

3 Connectors

Connector	Manufacturer	Part Number
Power	TE Connectivity	640456-7
VMEAS1,VMEAS2	Wuerth	61201021621
TEMP1,TEMP2	Wuerth	61200621621
FAN	Molex	90130-1226
I2C_5V	Harting	09185066324
Digital Temp	TE Connectivity	640456-4
I2C_3V	Molex	90130-1206
Outputs, Inputs	Wuerth	61202021621
1P1	EPT	244-11300-15
1P2	EPT	244-22300-15
Battery Holder	Keystone Electronics	1066
IPMB	Harwin	M80-8531042

Table 1: Connectors

4 Connector Pin Assignments

PIN	SIGNAL	PIN	SIGNAL
1	+3.3V	2	
3	+3.3V	4	
5	GND	6	PWM_1
7	GND	8	TACH_11
9	TACH_10	10	TACH_9
11	PWM_3	12	+5V
13	TACH_8	14	TACH_7
15	GND	16	TACH_6
17	PWM_2	18	TACH_5
19	TACH_4	20	+5V
21	TACH_3	22	PWM_1
23	GND	24	TACH_2
25	TACH_1	26	TACH_0

Table 2: Fan Connector

PIN	SIGNAL
1	SDA_2
2	SCL_2
3	SYS_RST
4	INT_2
5	+5V
6	GND

Table 3: I2C_5V Connector

PIN	SIGNAL
1	+5V
2	SDA_3
3	GND
4	SCL_3

Table 4: Digital Temp Connector

PIN	SIGNAL
1	SCL_1
2	VCC
3	SDA_1
4	GND
5	SDA_0
6	SCL_0

Table 5: I2C_3V Connector

PIN	SIGNAL	PIN	SIGNAL
1	OUT1	2	OUT2
3	OUT3	4	+5V
5	OUT4	6	OUT5
7	GND	8	OUT6
9	OUT7	10	OUT8
11	OUT9	12	+5V
13	OUT10	14	OUT11
15	GND	16	OUT12
17	OUT13	18	OUT14
19	OUT15	20	OUT16

Table 6: Outputs Connector

PIN	SIGNAL	PIN	SIGNAL
1	IN1	2	IN2
3	IN3	4	+5V
5	IN4	6	IN5
7	GND	8	IN6
9	IN7	10	IN8
11	IN9	12	+5V
13	IN10	14	IN11
15	GND	16	IN12
17	IN13	18	IN14
19	IN15	20	IN16

Table 7: Inputs Connector

PIN	SIGNAL
1	SYSRESET#
2	ACFAIL#
3	V4 (-12V)
4	GND
5	V3 (+12V)
6	GND
7	V1 (+3.3V)
8	GND
9	V2 (+5V)
10	GND

Table 10: VMEAS1 Connector

PIN	SIGNAL
1	VREF
2	Temp3
3	VREF
4	Temp2
5	VREF
6	Temp1

Table 8: Temp1 Connector

PIN	SIGNAL
1	VREF
2	Temp6
3	VREF
4	Temp5
5	VREF
6	Temp5

Table 9: Temp2 Connector

PIN	SIGNAL
1	SYSFAIL#
2	VREF
3	V7
4	GND
5	V8
6	GND
7	V6
8	GND
9	V5
10	GND

Table 11: VMEAS2 Connector

PIN	SIGNAL
1	
2	
3	GND
4	GND
5	+5V
6	+3.3V_AUX
7	PWR_FAIL

Table 12: Power Connector

PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL
A25	ETH_TX+	B25	ETH_RX+	C25	GND
A24	ETH_TX-	B24	ETH_RX-	C24	PRIM_IN#
A23	GND	B23	GND	C23	PRES#
A22	HLY_OUT#	B22	HLY_IN#	C22	PRIM_OUT#
A21	GND	B21	SDA_3	C21	SCL3
A20	RS232_TX	B20		C20	
A19		B19	VREF	C19	TEMP6
A18	-48V_A	B18	VCC	C18	TEMP4
A17	RS232_RX	B17	VCC	C17	TEMP5
A16		B16	VCC	C16	TEMP2
A15	-48V_A_RTN	B15	VCC	C15	TEMP1
A11	SDA_2	B11	SCL_2	C11	INT_2
A10	TACH_0	B10	TACH_1	C10	TACH_2
A9	PWM1	B9	TACH_3	C9	TACH_4
A8	PWM2	B8	TACH_5	C8	TACH_6
A7	PWM3	B7	TACH_7	C7	TACH_8
A6	PWM1	B6	TACH_9	C6	TACH_10
A5	TACH11	B5	SDA_1	C5	SCL_1
A4	GND	B4	SDA_0	C4	SCL_0
A3	IPMB_SDA_B	B3	IPMB_SCL_B	C3	IPMB_SDA_A
A2	IPMB_SCL_A	B2		C2	
A1	SYSRESET*	B1	ACFAIL*	C1	SYS_RST_SW

Table 13: IPI Connector Rows: A,B,C (Note: Not used for VPX ChMC)

PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL
D25	E1R+	E25	T1R+	F25	GND
D24	E1R-	E24	T1R-	F24	GND
D23	GND	E23	GND	F23	GND
D22	UPDATE_RX	E22	UPDATE_TX	F22	GND
D21	INT_3	E21	GND	F21	GND
D20		E20	VREF	F20	GND
D19	AN4_IN	E19	TEMP5	F19	GND
D18	AN5_IN	E18	-48V_B	F18	GND
D17	AN7_IN	E17		F17	GND
D16	AN6_IN	E16		F16	GND
D15	SYSFAIL*	E15	-48V_B_RTN	F15	GND
				F14	GND
				F15	GND
				F12	GND
D11	GND	E11	FTP_0	F11	GND
D10	+3.3V_IN	E10	FTP_1	F10	GND
D9	+5V_IN	E9	FTP_2	F9	GND
D8	+3.3V_IN	E8	FTP_3	F8	GND
D7	+5V_IN	E7	AN2_IN	F7	GND
D6	+3.3V_IN	E6	AN3_IN	F6	GND
D5	+5V_IN	E5	AN4_IN	F5	GND
D4	+3.3V_IN	E4	AN0_IN	F4	GND
D3	+5V_IN	E3	AN1_IN	F3	GND
D2	POWER_FAIL	E2	GND	F2	GND
D1	GA1	E1	GA0	F1	GND

Table 14: 1P1 Connector Rows: D,E,F (Note: Not used for VPX ChMC)

PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL
A22		B22		C22	
A21		B21		C21	+5V
A20		B20		C20	
A19		B19		C19	GND
A18		B18		C18	
A17		B17		C17	
A16		B16		C16	
A15		B15		C15	
A14		B14		C14	+5V
A13	OUT16	B13	OUT15	C13	
A12	OUT14	B12	OUT13	C12	
A11	OUT12	B11	OUT11	C11	GND
A10		B10		C10	
A9		B9		C9	+5V
A8		B8		C8	GND
A7		B7		C7	
A6		B6		C6	
A5		B5		C5	
A4		B4		C4	GND
A3	IN13	B3	IN10	C3	IN7
A2	IN14	B2	IN11	C2	IN8
A1	IN15	B1	IN12	C1	IN9

Table 15: 1P2 Connector Rows: A,B,C (Note: Not used for VPX ChMC)

PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL
D22		E22		F22	GND
D21		E21		F21	GND
D20		E20		F20	GND
D19		E19		F19	GND
D18		E18		F18	GND
D17		E17		F17	GND
D16		E16		F16	GND
D15	OUT10	E15	OUT9	F15	GND
D14	OUT8	E14	OUT7	F14	GND
D13	OUT6	E13	OUT5	F15	GND
D12	OUT4	E12	OUT3	F12	GND
D11	OUT2	E11	OUT1	F11	GND
D10		E10		F10	GND
D9		E9		F9	GND
D8		E8		F8	GND
D7		E7		F7	GND
D6		E6		F6	GND
D5		E5		F5	GND
D4		E4	IN16	F4	GND
D3	IN4	E3	IN1	F3	GND
D2	IN5	E2	IN2	F2	GND
D1	IN6	E1	IN3	F1	GND

Table 16: 1P2 Connector Rows:D,E,F (Note: Not used for VPX ChMC)

IPMB connector. Mounted only for fixed mounted version on 1P1 footprint, pins A2-E2, A3-E3

		IPMB- SDA-A	IPMB- SCL-B	IPMB- SDA-B
GND				IPMB- SCL-A

Table 17: IPMB Connector pinout



Figure 3 IPMB Connector Location