

A. ECAD Design Information

This appendix contains information that supports the development of the PCB ECAD model for this device. It is intended to be used by PCB designers.

A.1 Part Number Indexing

Orderable Part Number	Number of Pins	Package Type	Package Code/POD Number
R5F566TAAGFF#10	80	LQFP	PLQP0080JA-B
R5F566TAAGFH#10	112	LQFP	PLQP0112JA-B
R5F566TAAGFM#10	64	LFQFP	PLQP0064KB-C
R5F566TAAGFM#30	64	LFQFP	PLQP0064KB-C
R5F566TAAGFN#10	80	LFQFP	PLQP0080KB-B
R5F566TAAGFN#30	80	LFQFP	PLQP0080KB-B
R5F566TAAGFP#10	100	LFQFP	PLQP0100KB-B
R5F566TKGDFP#30	100	LFQFP	PLQP0100KB-B
R5F566TABGFP#30	100	LFQFP	PLQP0100KB-B
R5F566TAEGFF#10	80	LQFP	PLQP0080JA-B
R5F566TAEGFH#10	112	LQFP	PLQP0112JA-B
R5F566TAEGFM#10	64	LFQFP	PLQP0064KB-C
R5F566TAEGFN#10	80	LFQFP	PLQP0080KB-B
R5F566TAEGFP#10	100	LFQFP	PLQP0100KB-B
R5F566TKADFP#30	100	LFQFP	PLQP0100KB-B
R5F566TEAGFF#10	80	LQFP	PLQP0080JA-B
R5F566TEAGFH#10	112	LQFP	PLQP0112JA-B
R5F566TEAGFM#10	64	LFQFP	PLQP0064KB-C
R5F566TEAGFM#30	64	LFQFP	PLQP0064KB-C
R5F566TEAGFN#10	80	LFQFP	PLQP0080KB-B
R5F566TEAGFP#10	100	LFQFP	PLQP0100KB-B
R5F566TEAGFP#30	100	LFQFP	PLQP0100KB-B
R5F566TEBGFP#10	100	LFQFP	PLQP0100KB-B
R5F566TEBGFP#30	100	LFQFP	PLQP0100KB-B
R5F566TEEGFF#10	80	LQFP	PLQP0080JA-B
R5F566TEEGFH#10	112	LQFP	PLQP0112JA-B
R5F566TEEGFM#10	64	LFQFP	PLQP0064KB-C
R5F566TEEGFN#10	80	LFQFP	PLQP0080KB-B
R5F566TEEGFP#10	100	LFQFP	PLQP0100KB-B
R5F566TEFGFP#10	100	LFQFP	PLQP0100KB-B
R5F566TEFGFP#30	100	LFQFP	PLQP0100KB-B
R5F566TFAGFP#10	100	LFQFP	PLQP0100KB-B
R5F566TFAGFP#30	100	LFQFP	PLQP0100KB-B
R5F566TFBGFP#10	100	LFQFP	PLQP0100KB-B
R5F566TCGFB#10	144	LFQFP	PLQP0144KA-B
R5F566TCGFB#30	144	LFQFP	PLQP0144KA-B
R5F566TCGFP#10	100	LFQFP	PLQP0100KB-B
R5F566TFEGFP#10	100	LFQFP	PLQP0100KB-B
R5F566TFFGFP#10	100	LFQFP	PLQP0100KB-B
R5F566TFGGFB#10	144	LFQFP	PLQP0144KA-B
R5F566TFGGFP#10	100	LFQFP	PLQP0100KB-B
R5F566TKAGFP#10	100	LFQFP	PLQP0100KB-B
R5F566TKAGFP#30	100	LFQFP	PLQP0100KB-B
R5F566TKBGFP#10	100	LFQFP	PLQP0100KB-B
R5F566TKCDFP#30	100	LFQFP	PLQP0100KB-B
R5F566TKCGFB#10	144	LFQFP	PLQP0144KA-B
R5F566TKCGFP#10	100	LFQFP	PLQP0100KB-B
R5F566TKEGFP#10	100	LFQFP	PLQP0100KB-B
R5F566TKFGFP#10	100	LFQFP	PLQP0100KB-B
R5F566TKGGFB#10	144	LFQFP	PLQP0144KA-B
R5F566TKGGFP#10	100	LFQFP	PLQP0100KB-B

A.2 Symbol Pin Information

A.2.1 144-LFQFP

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
1	P14	I/O	MTIOC4B/MTIOC4B#/GTIOC2A/GTIOC9A/GTIOC2A#/GTIOC9A#/IRQ11
2	P13	I/O	MTIOC4A/MTIOC4A#/GTIOC1A/GTIOC8A/GTIOC1A#/GTIOC8A#/IRQ10
3	P12	I/O	MTIOC3B/MTIOC3B#/GTIOC0A/GTIOC7A/GTIOC0A#/GTIOC7A#/IRQ9
4	PE6	I/O	RD#/GTETRGA/GTETRGA/GTETRGC/GTETRGC/POE10#/IRQ3
5	PE5	I/O	BCLK/MTIOC9D/MTIOC9D#/GTIOC3A/GTETRGA/GTIOC3A#/GTETRGC/SCK9/CTS9#/RTS9#/SS9#/IRQ0/ADST0
6	VCC	Power	-
7	EMLE	Input	-
8	VSS	Power	-
9	UB	Input	P00/A11/MTIOC9A/MTIOC9A#/CACREF/RXD9/SMISO9/SSCL9/RXD12/SMISO12/SSCL12/RXDX12/IRQ2/ADST1/COMP0
10	VCL	Power	-
11	MD	Input	FINED
12	P01	I/O	A10/MTIOC9C/MTIOC9C#/GTETRGA/GTETRGA/GTETRGC/GTETRGC/POE12#/TXD9/SMOS9/SSDA9/TXD12/SMOS12/SSDA12/TXD12/SIOX12/IRQ4/ADST2/COMP1
13	PE4	I/O	A9/MTCLKC/MTCLKC#/GTETRGA/GTETRGA/GTETRGC/GTETRGC/POE10#/SCK9/IRQ1
14	PE3	I/O	A8/MTCLKD/MTCLKD#/GTETRGA/GTETRGA/GTETRGC/GTETRGC/POE11#/CTS9#/RTS9#/SS9#/IRQ2-DS
15	\RES	Input	-
16	XTAL	Output	P37
17	VSS	Power	-
18	EXTAL	Input	P36
19	VCC	Power	-
20	UPSEL	Input	PE2/POE10#/NMI
21	PE1	I/O	WR0#/WR#/MTIOC9D/MTIOC9D#/TMO5/CTS5#/RTS5#/SS5#/CTS12#/RTS12#/SS12#/SSLA3/IRQ15
22	PE0	I/O	WR1#/BC1#/WAIT#/MTIOC9B/MTIOC9B#/TMC1/TMC15/RXD5/SMISO5/SSCL5/SSLA2/CRX0/USB0_OVRCURB/IRQ7
23	\TRST	Input	PD7/MTIOC9A/MTIOC9A#/GTIOC0A/GTIOC3A/GTIOC0A#/GTIOC3A#/TMR1/TMR15/TXD5/SMOS15/SSDA5/SSLA1/CTX0/IRQ8
24	TMS	Input	PD6/MTIOC9C/MTIOC9C#/GTIOC0B/GTIOC3B/GTIOC0B#/GTIOC3B#/TMO1/CTS1#/RTS1#/SS1#/CTS11#/RTS11#/SS11#/SSLA0/IRQ5/ADST0
25	TDI	Input	PD5/GTIOC1A/GTETRGA/GTIOC1A#/TMR0/TMR6/RXD1/SMISO1/SSCL1/RXD11/SMISO11/SSCL11/IRQ6
26	TCK	Input	PD4/GTIOC1B/GTETRGA/GTIOC1B#/TMC10/TMC16/SCK1/SCK11/IRQ2
27	TDO	Output	PD3/GTIOC2A/GTETRGC/GTIOC2A#/TMO0/TXD1/SMOS1/SSDA1/TXD11/SMOS11/SSDA11
28	TRCLK	Output	PD2/A7/GTIOC2B/GTIOC0A/GTIOC2B#/GTIOC0A#/TMC1/TMO4/SCK5/SCK8/MOSIA/USB0_VBUS
29	TRDATA3	Output	PD1/A6/GTIOC3A/GTIOC0B/GTIOC3A#/GTIOC0B#/TMO2/RXD8/SMISO8/SSCL8/MISOA
30	TRDATA2	Output	PD0/A5/GTIOC3B/GTIOC1A/GTIOC3B#/GTIOC1A#/TMO6/TXD8/SMOS18/SSDA8/RSPCKA
31	TRDATA7	Output	PF3/A19/CS3#/GTETRGA/TMO7/CTS11#/RTS11#/SS11#/CRX0/IRQ14/COMP0
32	TRDATA6	Output	PF2/A18/CS2#/GTETRGA/TMO3/SCK11/CTX0/IRQ5/COMP1
33	TRDATA5	Output	PF1/A17/CS1#/GTETRGC/TMO5/RXD11/SMISO11/SSCL11/IRQ13/COMP2
34	TRDATA4	Output	PF0/A0/BC0#/GTETRGC/TMO1/TXD11/SMOS11/SSDA11/IRQ12/COMP3
35	USB0_DM	I/O	-
36	USB0_DP	I/O	-
37	VSS_USB	Power	-
38	VCC_USB	Power	-
39	TRDATA1	Output	PB7/A4/GTIOC1B/GTIOC1B#/SCK5/SCK11/SCK12/USB0_OVRCURB
40	TRDATA0	Output	PB6/A3/GTIOC2A/GTIOC2A#/RDX5/SMISO5/SSCL5/RXD11/SMISO11/SSCL11/RXD12/SMISO12/SSCL12/RXDX12/CRX0/USB0_OVRCURA/IRQ2
41	TRSYNC	Output	PB5/A2/GTIOC2B/GTIOC2B#/TXD5/SMOS15/SSDA5/TXD11/SMOS11/SSDA11/TXD12/SMOS12/SSDA12/TXD12/SIOX12/CTX0/USB0_VBUSEN
42	VCC	Power	-

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
43	TRSYNC1	Output	PB4/A1/GTETRGA/GTETRGB/GTETRGD/POE8#/CTS5#/RTS5#/SS5#/SCK11/CTS11#/RTS11#/SS11#/USB0_OVRCURB/IRQ3-DS
44	VSS	Power	-
45	PC2	I/O	CS1#/MTIOC0D/MTIOC0D#/GTADSM0/SCK8/USB0_ID/USB0_OVRCURA/IRQ15/ADSM0/COMP5
46	PC1	I/O	A16/MTIOC0C/MTIOC0C#/GTADSM1/TXD8/SMOSI8/SSDA8/USB0_EXICEN/USB0_VBUSEN/IRQ13/ADSM1/COMP4
47	PC0	I/O	CS0#/MTIOC0B/MTIOC0B#/RXD8/SMISO8/SSCL8/USB0_VBUS/IRQ12/COMP3
48	PB3	I/O	A7/MTIOC0A/MTIOC0A#/CACREF/SCK6/RSPCKA/IRQ9
49	PB2	I/O	A6/MTIOC0B/MTIOC0B#/GTADSM0/TMRI0/TXD6/SMOSI6/SSDA6/SDA0/ADSM0
50	PB1	I/O	A5/MTIOC0C/MTIOC0C#/GTADSM1/TMCI0/RXD6/SMISO6/SSCL6/SCL0/IRQ4/ADSM1
51	PB0	I/O	A0/BC0#/A4/MTIOC0D/MTIOC0D#/TMO0/TXD6/SMOSI6/SSDA6/CTS11#/RTS11#/SS11#/MOSIA/IRQ8/ADTRG2#
52	PA7	I/O	A15/MTCLKA/MTCLKC/MTCLKA#/MTCLKC#/GTADSM0/TMO2/RXD11/SMISO11/SSCL11/RXD12/SMISO12/SSCL12/RDX12/CRX0/ADSM0
53	PA6	I/O	A14/MTCLKB/MTCLKD/MTCLKB#/MTCLKD#/GTADSM1/TMO6/TXD11/SMOSI11/SSDA11/TXD12/SMOSI12/SSDA12/TXD12/SIOX12/CTX0/IRQ7/ADSM1
54	PA5	I/O	A3/MTIOC1A/MTIOC1A#/TMCI3/RXD6/SMISO6/SSCL6/RXD8/SMISO8/SSCL8/MISOA/IRQ1/ADTRG1#
55	PA4	I/O	A2/MTIOC1B/MTIOC1B#/TMCI7/SCK6/TXD8/SMOSI8/SSDA8/RSPCKA/ADTRG0#
56	PA3	I/O	A1/MTIOC2A/MTIOC2A#/GTADSM0/TMRI7/TXD9/SMOSI9/SSDA9/SCK8/SSLA0
57	PA2	I/O	A0/BC0#/MTIOC2B/MTIOC2B#/GTADSM1/TMO7/CTS6#/RTS6#/SS6#/RXD9/SMISO9/SSCL9/SCK11/SSLA1
58	PA1	I/O	MTIOC6A/MTIOC6A#/TMO4/TXD9/SMOSI9/SSDA9/RXD11/SMISO11/SSCL11/SSLA2/CRX0/USB0_ID/USB0_OVRCURA/IRQ14-DS/ADTRG0#
59	PA0	I/O	MTIOC6C/MTIOC6C#/TMO2/SCK9/TXD11/SMOSI11/SSDA11/SSLA3/CTX0/USB0_EXICEN/USB0_VBUSEN
60	P35	I/O	A13/MTIOC2A/MTIOC9A/MTIOC2A#/MTIOC9A#/GTADSM0/TMO0/CTS8#/RTS8#/SS8#/TXD1/SMOSI1/SSDA1/IRQ6
61	P34	I/O	A12/MTIOC2B/MTIOC9B/MTIOC2B#/MTIOC9B#/GTADSM1/GTETRGB/TMO4/CTS9#/RTS9#/SS9#/RXD1/SMISO1/SSCL1/USB0_OVRCURB/IRQ3
62	PC6	I/O	MTIOC1A/MTIOC9C/MTIOC1A#/MTIOC9C#/RXD11/SMISO11/SSCL11/CRX0/IRQ11-DS
63	PC5	I/O	MTIOC1B/MTIOC9D/MTIOC1B#/MTIOC9D#/TXD11/SMOSI11/SSDA11/CTX0/IRQ10-DS
64	VCC	Power	-
65	P96	I/O	CS0#/WAIT#/GTETRGA/GTETRGB/GTETRGD/POE4#/CTS8#/RTS8#/SS8#/IRQ4-DS
66	VSS	Power	-
67	P95	I/O	MTIOC6B/MTIOC6B#/GTIOC4A/GTIOC7A/GTIOC4A#/GTIOC7A#
68	P94	I/O	MTIOC7A/MTIOC7A#/GTIOC5A/GTIOC8A/GTIOC5A#/GTIOC8A#
69	P93	I/O	MTIOC7B/MTIOC7B#/GTIOC6A/GTIOC9A/GTIOC6A#/GTIOC9A#
70	P92	I/O	MTIOC6D/MTIOC6D#/GTIOC4B/GTIOC7B/GTIOC4B#/GTIOC7B#
71	P91	I/O	MTIOC7C/MTIOC7C#/GTIOC5B/GTIOC8B/GTIOC5B#/GTIOC8B#
72	P90	I/O	MTIOC7D/MTIOC7D#/GTIOC6B/GTIOC9B/GTIOC6B#/GTIOC9B#
73	P76	I/O	D0 [A0/D0]/MTIOC4D/MTIOC4D#/GTIOC2B/GTIOC6B/GTIOC2B#/GTIOC6B#
74	P75	I/O	D1 [A1/D1]/MTIOC4C/MTIOC4C#/GTIOC1B/GTIOC5B/GTIOC1B#/GTIOC5B#
75	P74	I/O	D2 [A2/D2]/MTIOC3D/MTIOC3D#/GTIOC0B/GTIOC4B/GTIOC0B#/GTIOC4B#
76	P73	I/O	D3 [A3/D3]/MTIOC4B/MTIOC4B#/GTIOC2A/GTIOC6A/GTIOC2A#/GTIOC6A#
77	P72	I/O	D4 [A4/D4]/MTIOC4A/MTIOC4A#/GTIOC1A/GTIOC5A/GTIOC1A#/GTIOC5A#
78	P71	I/O	D5 [A5/D5]/MTIOC3B/MTIOC3B#/GTIOC0A/GTIOC4A/GTIOC0A#/GTIOC4A#
79	P70	I/O	D6 [A6/D6]/GTETRGA/GTETRGB/GTETRGD/POE0#/CTS9#/RTS9#/SS9#/IRQ5-DS
80	PG2	I/O	D11 [A11/D11]/GTETRGA/GTIOC0B/GTIOC0B#/SCK9/IRQ2/COMP0
81	PG1	I/O	D12 [A12/D12]/GTIOC0A/GTIOC0A#/TXD9/SMOSI9/SSDA9/IRQ1/COMP1
82	PG0	I/O	D13 [A13/D13]/GTIOC1B/GTIOC1B#/RXD9/SMISO9/SSCL9/IRQ0/COMP2
83	PK2	I/O	D14 [A14/D14]/GTIOC1A/GTIOC1A#/POE12#/CTS9#/RTS9#/SS9#/SCK5/IRQ9-DS/COMP3

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
84	PK1	I/O	D15 [A15/D15]/GTIOC2B/GTIOC2B#/POE13#/CTS8#/RTS8#/SS8#/TXD5/SMOSI5/SSDA5/IR Q8-DS/COMP4
85	PK0	I/O	CS1#/GTIOC2A/GTIOC2A#/POE14#/RXD5/SMISO5/SSCL5/IRQ15-DS/COMP5
86	P33	I/O	D7 [A7/D7]/MTIOC3A/MTCLKA/MTIOC3A#/MTCLKA#/GTIOC3B/GTIOC3B#/TMO0/SSLA3 /IRQ13-DS
87	P32	I/O	D8 [A8/D8]/MTIOC3C/MTCLKB/MTIOC3C#/MTCLKB#/GTIOC3A/GTIOC3A#/TMO6/SSLA2 /IRQ12-DS
88	VCC	Power	-
89	P31	I/O	D9 [A9/D9]/MTIOC0A/MTCLKC/MTIOC0A#/MTCLKC#/TMRI6/SSLA1/IRQ6
90	VSS	Power	-
91	P30	I/O	D10 [A10/D10]/MTIOC0B/MTCLKD/MTIOC0B#/MTCLKD#/TMCI6/SCK8/CTS8#/RTS8#/SS8 #/SSLA0/IRQ7/COMP3
92	P27	I/O	CS3#/MTIOC1A/MTIOC0C/MTIOC1A#/MTIOC0C#/POE9#/IRQ15
93	P26	I/O	CS2#/MTIOC9A/MTIOC9A#/CTS1#/RTS1#/SS1#/IRQ11/ADST0
94	P25	I/O	CS3#/MTIOC9C/MTIOC9C#/SCK1/IRQ10/ADST1
95	P24	I/O	D11 [A11/D11]/MTIC5U/MTIC5U#/TMCI2/TMO6/CTS8#/RTS8#/SS8#/SCK8/RSPCKA/IRQ4 /COMP0
96	P23	I/O	D12 [A12/D12]/MTIC5V/MTIC5V#/TMO2/CACREF/TXD8/SMOSI8/SSDA8/TXD12/SMOSI12 /SSDA12/TXDX12/SIOX12/MOSIA/CTX0/IRQ11/COMP1
97	P22	I/O	D13 [A13/D13]/MTIC5W/MTCLKD/MTIC5W#/MTCLKD#/MTIOC9B/TMRI2/TMO4/RXD8/S MISO8/SSCL8/RXD12/SMISO12/SSCL12/RXDX12/MISOA/CRX0/IRQ10/ADTRG2#/CO MP2
98	PC4	I/O	A20/MTIOC9B/MTIOC9B#/TXD1/SMOSI1/SSDA1/TXD12/SMOSI12/SSDA12/TXDX12/S IOX12/ADST2/COMP5
99	PC3	I/O	MTIOC9D/MTIOC9D#/RXD1/SMISO1/SSCL1/RXD12/SMISO12/SSCL12/RXDX12/IRQ14 /COMP4
100	P21	I/O	D14 [A14/D14]/MTIOC9A/MTCLKA/MTIOC9A#/MTCLKA#/TMCI4/TXD8/SMOSI8/SSDA8/T XD12/SMOSI12/SSDA12/TXDX12/SIOX12/MOSIA/IRQ6-DS/AN217/ADTRG1#/COMP5
101	P20	I/O	D15 [A15/D15]/MTIOC9C/MTCLKB/MTIOC9C#/MTCLKB#/TMRI4/CTS8#/RTS8#/SS8#/SCK8 /RSPCKA/IRQ7-DS/AN216/ADTRG0#/COMP4
102	P65	I/O	A12/IRQ9/AN211/CMPC53/DA1
103	P64	I/O	A13/IRQ8/AN210/CMPC33/DA0
104	AVCC2	Power	-
105	AVCC2	Power	-
106	AVSS2	Power	-
107	P63	I/O	A14/A12/IRQ7/AN209/CMPC23
108	P62	I/O	A15/A13/IRQ6/AN208/CMPC43
109	P61	I/O	A16/A14/IRQ5/AN207/CMPC13
110	P60	I/O	A17/A15/IRQ4/AN206/CMPC03
111	P55	I/O	A18/A16/IRQ3/AN203/CMPC32
112	P54	I/O	A19/A17/IRQ2/AN202/CMPC22
113	P53	I/O	A20/A18/IRQ1/AN201/CMPC12
114	P52	I/O	IRQ0/AN200/CMPC02
115	P51	I/O	AN205/CMPC52
116	P50	I/O	AN204/CMPC42
117	PH7	I/O	AN106/CVREFC1
118	PH6	I/O	AN105
119	PH5	I/O	AN104
120	P47	I/O	AN103
121	P46	Input	AN102/CMPC50/CMPC51
122	P45	Input	AN101/CMPC40/CMPC41
123	P44	Input	AN100/CMPC30/CMPC31

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
124	PH4	Input	AN107/PGAVSS1
125	PH3	I/O	AN006/CVREFC0
126	PH2	I/O	AN005
127	PH1	I/O	AN004
128	P43	I/O	AN003
129	P42	Input	AN002/CMPC20/CMPC21
130	P41	Input	AN001/CMPC10/CMPC11
131	P40	Input	AN000/CMPC00/CMPC01
132	PH0	Input	AN007/PGAVSS0
133	AVCC1	Power	-
134	AVCC0	Power	-
135	AVSS0	Power	-
136	AVSS1	Power	-
137	P82	I/O	ALE/WAIT#/MTIC5U/MTIC5U#/TMO4/SCK6/SCK12/IRQ3/COMP5
138	P81	I/O	CS2#/MTIC5V/MTIC5V#/TMCI4/TXD6/SMOSI6/SSDA6/TXD12/SMOSI12/SSDA12/TXD X12/SIOX12/COMP4
139	P80	I/O	CS1#/MTIC5W/MTIC5W#/TMRI4/RXD6/SMISO6/SSCL6/RXD12/SMISO12/SSCL12/RX DX12/IRQ5/COMP3
140	P11	I/O	RD#/MTIOC3A/MTCLKC/MTIOC3A#/MTCLKC#/MTIOC9D/GTIOC3B/GTETRGA/GTIOC3 B#/GTETRGC/TMO3/POE9#/IRQ1-DS
141	P10	I/O	MTIOC9B/MTCLKD/MTIOC9B#/MTCLKD#/GTETRGB/GTETRGD/TMRI3/POE12#/CTS6# /RTS6#/SS6#/IRQ0-DS
142	P17	I/O	MTIOC4D/MTIOC4D#/GTIOC2B/GTIOC9B/GTIOC2B#/GTIOC9B#/IRQ14
143	P16	I/O	MTIOC4C/MTIOC4C#/GTIOC1B/GTIOC8B/GTIOC1B#/GTIOC8B#/IRQ13
144	P15	I/O	MTIOC3D/MTIOC3D#/GTIOC0B/GTIOC7B/GTIOC0B#/GTIOC7B#/IRQ12

A.2.2 112-LQFP

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
1	P14	I/O	MTIOC4B/MTIOC4B#/GTIOC2A/GTIOC9A/GTIOC2A#/GTIOC9A#/IRQ11
2	P13	I/O	MTIOC4A/MTIOC4A#/GTIOC1A/GTIOC8A/GTIOC1A#/GTIOC8A#/IRQ10
3	P12	I/O	MTIOC3B/MTIOC3B#/GTIOC0A/GTIOC7A/GTIOC0A#/GTIOC7A#/IRQ9
4	PE5	I/O	BCLK/MTIOC9D/MTIOC9D#/GTIOC3A/GTETRGB/GTIOC3A#/GTETRGD/SCK9/CTS9#/R TS9#/SS9#/IRQ0/ADST0
5	EMLE	Input	-
6	VSS	Power	-
7	UB	Input	P00/A11/MTIOC9A/MTIOC9A#/CACREF/RXD9/SMISO9/SSCL9/RXD12/SMISO12/SSCL 12/RXDX12/IRQ2/ADST1/COMP0
8	VCL	Power	-
9	MD	Input	FINED
10	P01	I/O	A10/MTIOC9C/MTIOC9C#/GTETRGA/GTETRGB/GTETRGC/GTETRGD/POE12#/TXD9/S MOSI9/SSDA9/TXD12/SMOSI12/SSDA12/TXD12/SIOX12/IRQ4/ADST2/COMP1
11	PE4	I/O	A9/MTCLKC/MTCLKC#/GTETRGA/GTETRGB/GTETRGC/GTETRGD/POE10#/SCK9/IRQ1
12	PE3	I/O	A8/MTCLKD/MTCLKD#/GTETRGA/GTETRGB/GTETRGC/GTETRGD/POE11#/CTS9#/RTS 9#/SS9#/IRQ2-DS
13	\RES	Input	-
14	XTAL	Output	P37
15	VSS	Power	-
16	EXTAL	Input	P36
17	VCC	Power	-
18	PE2	Input	POE10#/NMI
19	PE1	I/O	WR0#/WR#/MTIOC9D/MTIOC9D#/TMO5/CTS5#/RTS5#/SS5#/CTS12#/RTS12#/SS12# /SSLA3/IRQ15
20	PE0	I/O	WR1#/BC1#/WAIT#/MTIOC9B/MTIOC9B#/TMCI1/TMCI5/RXD5/SMISO5/SSCL5/SSLA 2/CRX0/IRQ7
21	\TRST	Input	PD7/MTIOC9A/MTIOC9A#/GTIOC0A/GTIOC3A/GTIOC0A#/GTIOC3A#/TMRI1/TMRI5/ TXD5/SMOSI5/SSDA5/SSLA1/CTX0/IRQ8
22	TMS	Input	PD6/MTIOC9C/MTIOC9C#/GTIOC0B/GTIOC3B/GTIOC0B#/GTIOC3B#/TMO1/CTS1#/R TS1#/SS1#/CTS11#/RTS11#/SS11#/SSLA0/IRQ5/ADST0

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
23	TDI	Input	PD5/GTIOC1A/GTETRGA/GTIOC1A#/TMRIO/TMRI6/RXD1/SMISO1/SSCL1/RXD11/SMISO11/SSCL11/IRQ6
24	TCK	Input	PD4/GTIOC1B/GTETRGB/GTIOC1B#/TMCIO/TMCi6/SCK1/SCK11/IRQ2
25	TDO	Output	PD3/GTIOC2A/GTETRGC/GTIOC2A#/TMO0/TXD1/SMOSI1/SSDA1/TXD11/SMOSI11/SSDA11
26	TRCLK	Output	PD2/A7/GTIOC2B/GTIOC0A/GTIOC2B#/GTIOC0A#/TMC1/TMO4/SCK5/SCK8/MOSIA
27	TRDATA3	Output	PD1/A6/GTIOC3A/GTIOC0B/GTIOC3A#/GTIOC0B#/TMO2/RXD8/SMISO8/SSCL8/MISOA
28	TRDATA2	Output	PD0/A5/GTIOC3B/GTIOC1A/GTIOC3B#/GTIOC1A#/TMO6/TXD8/SMOSI8/SSDA8/RSPCKA
29	TRDATA1	Output	PB7/A4/GTIOC1B/GTIOC1B#/SCK5/SCK11/SCK12
30	TRDATA0	Output	PB6/A3/GTIOC2A/GTIOC2A#/RXD5/SMISO5/SSCL5/RXD11/SMISO11/SSCL11/RXD12/SMISO12/SSCL12/RXD12/CRX0/IRQ2
31	TRSYNC	Output	PB5/A2/GTIOC2B/GTIOC2B#/TXD5/SMOSI5/SSDA5/TXD11/SMOSI11/SSDA11/TXD12/SMOSI12/SSDA12/TXD12/SIOX12/CTX0
32	VCC	Power	-
33	PB4	I/O	A1/GTETRGA/GTETRGB/GTETRGC/GTETRGD/POE8#/CTS5#/RTS5#/SS5#/SCK11/CTS11#/RTS11#/SS11#/IRQ3-DS
34	VSS	Power	-
35	PC2	I/O	CS1#/MTIOC0D/MTIOC0D#/GTADSM0/SCK8/IRQ15/ADSM0/COMP5
36	PC1	I/O	A16/MTIOC0C/MTIOC0C#/GTADSM1/TXD8/SMOSI8/SSDA8/IRQ13/ADSM1/COMP4
37	PC0	I/O	CS0#/MTIOC0B/MTIOC0B#/RXD8/SMISO8/SSCL8/IRQ12/COMP3
38	PB3	I/O	MTIOC0A/MTIOC0A#/CACREF/SCK6/RSPCKA/IRQ9
39	PB2	I/O	MTIOC0B/MTIOC0B#/GTADSM0/TMRIO/TXD6/SMOSI6/SSDA6/SDA0/ADSM0
40	PB1	I/O	MTIOC0C/MTIOC0C#/GTADSM1/TMCIO/RXD6/SMISO6/SSCL6/SCL0/IRQ4/ADSM1
41	PB0	I/O	A0/BC0#/MTIOC0D/MTIOC0D#/TMO0/TXD6/SMOSI6/SSDA6/CTS11#/RTS11#/SS11#/MOSIA/IRQ8/ADTRG2#
42	PA5	I/O	MTIOC1A/MTIOC1A#/TMCi3/RXD6/SMISO6/SSCL6/RXD8/SMISO8/SSCL8/MISOA/IRQ1/ADTRG1#
43	PA4	I/O	MTIOC1B/MTIOC1B#/TMCi7/SCK6/TXD8/SMOSI8/SSDA8/RSPCKA/ADTRG0#
44	PA3	I/O	MTIOC2A/MTIOC2A#/GTADSM0/TMRi7/TXD9/SMOSI9/SSDA9/SCK8/SSLA0
45	PA2	I/O	A0/BC0#/MTIOC2B/MTIOC2B#/GTADSM1/TMO7/CTS6#/RTS6#/SS6#/RXD9/SMISO9/SSCL9/SSLA1
46	PA1	I/O	MTIOC6A/MTIOC6A#/TMO4/TXD9/SMOSI9/SSDA9/RXD11/SMISO11/SSCL11/SSLA2/CRX0/IRQ14-DS/ADTRG0#
47	PA0	I/O	MTIOC6C/MTIOC6C#/TMO2/SCK9/TXD11/SMOSI11/SSDA11/SSLA3/CTX0
48	VCC	Power	-
49	P96	I/O	CS0#/WAIT#/GTETRGA/GTETRGB/GTETRGC/GTETRGD/POE4#/CTS8#/RTS8#/SS8#/IRQ4-DS
50	VSS	Power	-
51	P95	I/O	MTIOC6B/MTIOC6B#/GTIOC4A/GTIOC7A/GTIOC4A#/GTIOC7A#
52	P94	I/O	MTIOC7A/MTIOC7A#/GTIOC5A/GTIOC8A/GTIOC5A#/GTIOC8A#
53	P93	I/O	MTIOC7B/MTIOC7B#/GTIOC6A/GTIOC9A/GTIOC6A#/GTIOC9A#
54	P92	I/O	MTIOC6D/MTIOC6D#/GTIOC4B/GTIOC7B/GTIOC4B#/GTIOC7B#
55	P91	I/O	MTIOC7C/MTIOC7C#/GTIOC5B/GTIOC8B/GTIOC5B#/GTIOC8B#
56	P90	I/O	MTIOC7D/MTIOC7D#/GTIOC6B/GTIOC9B/GTIOC6B#/GTIOC9B#
57	P76	I/O	D0 [A0/D0]/MTIOC4D/MTIOC4D#/GTIOC2B/GTIOC6B/GTIOC2B#/GTIOC6B#
58	P75	I/O	D1 [A1/D1]/MTIOC4C/MTIOC4C#/GTIOC1B/GTIOC5B/GTIOC1B#/GTIOC5B#
59	P74	I/O	D2 [A2/D2]/MTIOC3D/MTIOC3D#/GTIOC0B/GTIOC4B/GTIOC0B#/GTIOC4B#
60	P73	I/O	D3 [A3/D3]/MTIOC4B/MTIOC4B#/GTIOC2A/GTIOC6A/GTIOC2A#/GTIOC6A#
61	P72	I/O	D4 [A4/D4]/MTIOC4A/MTIOC4A#/GTIOC1A/GTIOC5A/GTIOC1A#/GTIOC5A#
62	P71	I/O	D5 [A5/D5]/MTIOC3B/MTIOC3B#/GTIOC0A/GTIOC4A/GTIOC0A#/GTIOC4A#
63	P70	I/O	D6 [A6/D6]/GTETRGA/GTETRGB/GTETRGC/GTETRGD/POE0#/CTS9#/RTS9#/SS9#/IRQ5-DS
64	PG2	I/O	D11 [A11/D11]/GTETRGA/GTIOC0B/GTIOC0B#/SCK9/IRQ2/COMP0
65	PG1	I/O	D12 [A12/D12]/GTIOC0A/GTIOC0A#/TXD9/SMOSI9/SSDA9/IRQ1/COMP1
66	PG0	I/O	D13 [A13/D13]/GTIOC1B/GTIOC1B#/RXD9/SMISO9/SSCL9/IRQ0/COMP2
67	P33	I/O	D7 [A7/D7]/MTIOC3A/MTCLKA/MTIOC3A#/MTCLKA#/GTIOC3B/GTIOC3B#/TMO0/SSLA3/IRQ13-DS

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
68	P32	I/O	D8 [A8/D8]/MTIOC3C/MTCLKB/MTIOC3C#/MTCLKB#/GTIOC3A/GTIOC3A#/TMO6/SSLA2/IRQ12-DS
69	VCC	Power	-
70	P31	I/O	D9 [A9/D9]/MTIOC0A/MTCLKC/MTIOC0A#/MTCLKC#/TMRI6/SSLA1/IRQ6
71	VSS	Power	-
72	P30	I/O	D10 [A10/D10]/MTIOC0B/MTCLKD/MTIOC0B#/MTCLKD#/TMCi6/SCK8/CTS8#/RTS8#/SS8#/SSLA0/IRQ7/COMP3
73	P27	I/O	MTIOC1A/MTIOC0C/MTIOC1A#/MTIOC0C#/POE9#/IRQ15
74	P24	I/O	D11 [A11/D11]/MTIC5U/MTIC5U#/TMCi2/TMO6/CTS8#/RTS8#/SS8#/SCK8/RSPCKA/IRQ4/COMP0
75	P23	I/O	D12 [A12/D12]/MTIC5V/MTIC5V#/TMO2/CACREF/TXD8/SMOSI8/SSDA8/TXD12/SMOSI12/SSDA12/TXD12/SIOX12/MOSIA/CTX0/IRQ11/COMP1
76	P22	I/O	D13 [A13/D13]/MTIC5W/MTCLKD/MTIC5W#/MTCLKD#/MTIOC9B/TMRI2/TMO4/RXD8/SMISO8/SSCL8/RXD12/SMISO12/SSCL12/RXD12/MISOA/CRX0/IRQ10/ADTRG2#/COMP2
77	P21	I/O	D14 [A14/D14]/MTIOC9A/MTCLKA/MTIOC9A#/MTCLKA#/TMCi4/TXD8/SMOSI8/SSDA8/TXD12/SMOSI12/SSDA12/TXD12/SIOX12/MOSIA/IRQ6-DS/AN217/ADTRG1#/COMP5
78	P20	I/O	D15 [A15/D15]/MTIOC9C/MTCLKB/MTIOC9C#/MTCLKB#/TMRI4/CTS8#/RTS8#/SS8#/SCK8/RSPCKA/IRQ7-DS/AN216/ADTRG0#/COMP4
79	P65	I/O	A12/IRQ9/AN211/CMPC53/DA1
80	P64	I/O	A13/IRQ8/AN210/CMPC33/DA0
81	AVCC2	Power	-
82	AVSS2	Power	-
83	P63	I/O	A14/IRQ7/AN209/CMPC23
84	P62	I/O	A15/IRQ6/AN208/CMPC43
85	P61	I/O	A16/IRQ5/AN207/CMPC13
86	P60	I/O	A17/IRQ4/AN206/CMPC03
87	P55	I/O	A18/IRQ3/AN203/CMPC32
88	P54	I/O	A19/IRQ2/AN202/CMPC22
89	P53	I/O	A20/IRQ1/AN201/CMPC12
90	P52	I/O	IRQ0/AN200/CMPC02
91	P47	I/O	AN103
92	P46	Input	AN102/CMPC50/CMPC51
93	P45	Input	AN101/CMPC40/CMPC41
94	P44	Input	AN100/CMPC30/CMPC31
95	PH4	Input	AN107/PGAVSS1
96	P43	I/O	AN003
97	P42	Input	AN002/CMPC20/CMPC21
98	P41	Input	AN001/CMPC10/CMPC11
99	P40	Input	AN000/CMPC00/CMPC01
100	PH0	Input	AN007/PGAVSS0
101	AVCC1	Power	-
102	AVCC0	Power	-
103	AVSS0	Power	-
104	AVSS1	Power	-
105	P82	I/O	ALE/WAIT#/MTIC5U/MTIC5U#/TMO4/SCK6/SCK12/IRQ3/COMP5
106	P81	I/O	CS2#/MTIC5V/MTIC5V#/TMCi4/TXD6/SMOSI6/SSDA6/TXD12/SMOSI12/SSDA12/TXD12/SIOX12/COMP4
107	P80	I/O	CS1#/MTIC5W/MTIC5W#/TMRI4/RXD6/SMISO6/SSCL6/RXD12/SMISO12/SSCL12/RXD12/IRQ5/COMP3
108	P11	I/O	RD#/MTIOC3A/MTCLKC/MTIOC3A#/MTCLKC#/MTIOC9D/GTIOC3B/GTETRGA/GTIOC3B#/GTETRGC/TMO3/POE9#/IRQ1-DS
109	P10	I/O	MTIOC9B/MTCLKD/MTIOC9B#/MTCLKD#/GTETRGB/GTETRGD/TMRI3/POE12#/CTS6#/RTS6#/SS6#/IRQ0-DS

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
110	P17	I/O	MTIOC4D/MTIOC4D#/GTIOC2B/GTIOC9B/GTIOC2B#/GTIOC9B#/IRQ14
111	P16	I/O	MTIOC4C/MTIOC4C#/GTIOC1B/GTIOC8B/GTIOC1B#/GTIOC8B#/IRQ13
112	P15	I/O	MTIOC3D/MTIOC3D#/GTIOC0B/GTIOC7B/GTIOC0B#/GTIOC7B#/IRQ12

A.2.3 100-LFQFP (with PGA pseudo-differential input and with USB pin)

Applicable Part Numbers: R5F566TKGDFP#30, R5F566TFCDFP#30, R5F566TFGDFP#30, R5F566TKCGFP#30, R5F566TKGGFP#30, R5F566TFCGFP#30, R5F566TFGGFP#30, R5F566TFGDFP#10, R5F566TKGDFP#10, R5F566TKCDFP#10, R5F566TFCDFP#10.

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
1	PE5	I/O	BCLK/MTIOC9D/MTIOC9D#/GTIOC3A/GTETRGA/GTETRGA#/GTETRGD/SCK9/CTS9#/RTS9#/SS9#/IRQ0/ADST0
2	EMLE	Input	-
3	VSS	Power	-
4	UB	Input	P00/A11/MTIOC9A/MTIOC9A#/CACREF/RXD9/SMISO9/SSCL9/RXD12/SMISO12/SSCL12/RDX12/IRQ2/ADST1/COMP0
5	VCL	Power	-
6	MD	Input	FINED
7	P01	I/O	A10/MTIOC9C/MTIOC9C#/GTETRGA/GTETRGA#/GTETRGD/POE12#/TXD9/SMOSI9/SSDA9/TXD12/SMOSI12/SSDA12/TXD12/SIOX12/IRQ4/ADST2/COMP1
8	PE4	I/O	A9/MTCLKC/MTCLKC#/GTETRGA/GTETRGA#/GTETRGD/POE10#/SCK9/IRQ1
9	PE3	I/O	A8/MTCLKD/MTCLKD#/GTETRGA/GTETRGA#/GTETRGD/POE11#/CTS9#/RTS9#/SS9#/IRQ2-DS
10	\RES	Input	-
11	XTAL	Output	P37
12	VSS	Power	-
13	EXTAL	Input	P36
14	VCC	Power	-
15	UPSEL	Input	PE2/POE10#/NMI
16	PE1	I/O	WR0#/WR#/MTIOC9D/MTIOC9D#/TMO5/CTS5#/RTS5#/SS5#/CTS12#/RTS12#/SS12#/SSLA3/IRQ15
17	PE0	I/O	WR1#/BC1#/WAIT#/MTIOC9B/MTIOC9B#/TMC11/TMC15/RXD5/SMISO5/SSCL5/SSLA2/CRX0/USB0_OVRCURB/IRQ7
18	\TRST	Input	PD7/MTIOC9A/MTIOC9A#/GTIOC0A/GTIOC3A/GTIOC0A#/GTIOC3A#/TMRI1/TMRI5/TXD5/SMOSI5/SSDA5/SSLA1/CTX0/IRQ8
19	TMS	Input	PD6/MTIOC9C/MTIOC9C#/GTIOC0B/GTIOC3B/GTIOC0B#/GTIOC3B#/TMO1/CTS1#/RTS1#/SS1#/CTS11#/RTS11#/SS11#/SSLA0/IRQ5/ADST0
20	TDI	Input	PD5/GTIOC1A/GTETRGA/GTIOC1A#/TMRI0/TMRI6/RXD1/SMISO1/SSCL1/RXD11/SMISO11/SSCL11/IRQ6
21	TCK	Input	PD4/GTIOC1B/GTETRGA/GTIOC1B#/TMC10/TMC16/SCK1/SCK11/IRQ2
22	TDO	Output	PD3/GTIOC2A/GTETRGA/GTIOC2A#/TMO0/TXD1/SMOSI1/SSDA1/TXD11/SMOSI11/SSDA11
23	TRCLK	Output	PD2/A7/GTIOC2B/GTIOC0A/GTIOC2B#/GTIOC0A#/TMC11/TMO4/SCK5/SCK8/MOSIA/USB0_VBUS
24	USB0_DM	I/O	-
25	USB0_DP	I/O	-
26	VCC_USB	Power	-
27	TRDATA0	Output	PB6/A3/GTIOC2A/GTIOC2A#/RDX5/SMISO5/SSCL5/RXD11/SMISO11/SSCL11/RXD12/SMISO12/SSCL12/RDX12/CRX0/USB0_OVRCURA/IRQ2
28	TRSYNC	Output	PB5/A2/GTIOC2B/GTIOC2B#/TXD5/SMOSI5/SSDA5/TXD11/SMOSI11/SSDA11/TXD12/SMOSI12/SSDA12/TXD12/SIOX12/CTX0/USB0_VBUSEN
29	VCC	Power	-
30	PB4	I/O	A1/GTETRGA/GTETRGA#/GTETRGD/POE8#/CTS5#/RTS5#/SS5#/SCK11/CTS11#/RTS11#/SS11#/USB0_OVRCURB/IRQ3-DS
31	VSS	Power	VSS_USB
32	PB3	I/O	A7/MTIOC0A/MTIOC0A#/CACREF/SCK6/RSPCKA/IRQ9
33	PB2	I/O	A6/MTIOC0B/MTIOC0B#/GTADSM0/TMRI0/TXD6/SMOSI6/SSDA6/SDA0/ADSM0
34	PB1	I/O	A5/MTIOC0C/MTIOC0C#/GTADSM1/TMC10/RXD6/SMISO6/SSCL6/SCL0/IRQ4/ADSM1

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
35	PB0	I/O	A0/BC0#/A4/MTIOC0D/MTIOC0D#/TMO0/TXD6/SMOSI6/SSDA6/CTS11#/RTS11#/SS11#/MOSIA/IRQ8/ADTRG2#
36	PA5	I/O	A3/MTIOC1A/MTIOC1A#/TMCI3/RXD6/SMISO6/SSCL6/RXD8/SMISO8/SSCL8/MISOA/IRQ1/ADTRG1#
37	PA4	I/O	A2/MTIOC1B/MTIOC1B#/TMCI7/SCK6/TXD8/SMOSI8/SSDA8/RSPCKA/ADTRG0#
38	PA3	I/O	A1/MTIOC2A/MTIOC2A#/GTADSM0/TMRI7/TXD9/SMOSI9/SSDA9/SCK8/SSLA0
39	PA2	I/O	A0/BC0#/MTIOC2B/MTIOC2B#/GTADSM1/TMO7/CTS6#/RTS6#/SS6#/RXD9/SMISO9/SSCL9/SCK11/SSLA1
40	PA1	I/O	MTIOC6A/MTIOC6A#/TMO4/TXD9/SMOSI9/SSDA9/RXD11/SMISO11/SSCL11/SSLA2/CRX0/USB0_ID/USB0_OVRCURA/IRQ14-DS/ADTRG0#
41	PA0	I/O	MTIOC6C/MTIOC6C#/TMO2/SCK9/TXD11/SMOSI11/SSDA11/SSLA3/CTX0/USB0_EXICEN/USB0_VBUSEN
42	VCC	Power	-
43	P96	I/O	CS0#/WAIT#/GTETRGA/GTETRGB/GTETRGD/POE4#/CTS8#/RTS8#/SS8#/IRQ4-DS
44	VSS	Power	-
45	P95	I/O	MTIOC6B/MTIOC6B#/GTIOC4A/GTIOC7A/GTIOC4A#/GTIOC7A#
46	P94	I/O	MTIOC7A/MTIOC7A#/GTIOC5A/GTIOC8A/GTIOC5A#/GTIOC8A#
47	P93	I/O	MTIOC7B/MTIOC7B#/GTIOC6A/GTIOC9A/GTIOC6A#/GTIOC9A#
48	P92	I/O	MTIOC6D/MTIOC6D#/GTIOC4B/GTIOC7B/GTIOC4B#/GTIOC7B#
49	P91	I/O	MTIOC7C/MTIOC7C#/GTIOC5B/GTIOC8B/GTIOC5B#/GTIOC8B#
50	P90	I/O	MTIOC7D/MTIOC7D#/GTIOC6B/GTIOC9B/GTIOC6B#/GTIOC9B#
51	P76	I/O	D0 [A0/D0]/MTIOC4D/MTIOC4D#/GTIOC2B/GTIOC6B/GTIOC2B#/GTIOC6B#
52	P75	I/O	D1 [A1/D1]/MTIOC4C/MTIOC4C#/GTIOC1B/GTIOC5B/GTIOC1B#/GTIOC5B#
53	P74	I/O	D2 [A2/D2]/MTIOC3D/MTIOC3D#/GTIOC0B/GTIOC4B/GTIOC0B#/GTIOC4B#
54	P73	I/O	D3 [A3/D3]/MTIOC4B/MTIOC4B#/GTIOC2A/GTIOC6A/GTIOC2A#/GTIOC6A#
55	P72	I/O	D4 [A4/D4]/MTIOC4A/MTIOC4A#/GTIOC1A/GTIOC5A/GTIOC1A#/GTIOC5A#
56	P71	I/O	D5 [A5/D5]/MTIOC3B/MTIOC3B#/GTIOC0A/GTIOC4A/GTIOC0A#/GTIOC4A#
57	P70	I/O	D6 [A6/D6]/GTETRGA/GTETRGB/GTETRGD/POE0#/CTS9#/RTS9#/SS9#/IRQ5-DS
58	P33	I/O	D7 [A7/D7]/MTIOC3A/MTCLKA/MTIOC3A#/MTCLKA#/GTIOC3B/GTIOC3B#/TMO0/SSLA3/IRQ13-DS
59	P32	I/O	D8 [A8/D8]/MTIOC3C/MTCLKB/MTIOC3C#/MTCLKB#/GTIOC3A/GTIOC3A#/TMO6/SSLA2/IRQ12-DS
60	VCC	Power	-
61	P31	I/O	D9 [A9/D9]/MTIOC0A/MTCLKC/MTIOC0A#/MTCLKC#/TMRI6/SSLA1/IRQ6
62	VSS	Power	-
63	P30	I/O	D10 [A10/D10]/MTIOC0B/MTCLKD/MTIOC0B#/MTCLKD#/TMCI6/SCK8/CTS8#/RTS8#/SS8#/SSLA0/IRQ7/COMP3
64	P27	I/O	CS3#/MTIOC1A/MTIOC0C/MTIOC1A#/MTIOC0C#/POE9#/IRQ15
65	P24	I/O	D11 [A11/D11]/MTIC5U/MTIC5U#/TMCI2/TMO6/CTS8#/RTS8#/SS8#/SCK8/RSPCKA/IRQ4/COMP0
66	P23	I/O	D12 [A12/D12]/MTIC5V/MTIC5V#/TMO2/CACREF/TXD8/SMOSI8/SSDA8/TXD12/SMOSI12/SSDA12/TXDX12/SIOX12/MOSIA/CTX0/IRQ11/COMP1
67	P22	I/O	D13 [A13/D13]/MTIC5W/MTCLKD/MTIC5W#/MTCLKD#/MTIOC9B/TMRI2/TMO4/RXD8/SMISO8/SSCL8/RXD12/SMISO12/SSCL12/RXDX12/MISOA/CRX0/IRQ10/ADTRG2#/COMP2
68	P21	I/O	D14 [A14/D14]/MTIOC9A/MTCLKA/MTIOC9A#/MTCLKA#/TMCI4/TXD8/SMOSI8/SSDA8/TXD12/SMOSI12/SSDA12/TXDX12/SIOX12/MOSIA/IRQ6-DS/AN217/ADTRG1#/COMP5
69	P20	I/O	D15 [A15/D15]/MTIOC9C/MTCLKB/MTIOC9C#/MTCLKB#/TMRI4/CTS8#/RTS8#/SS8#/SCK8/RSPCKA/IRQ7-DS/AN216/ADTRG0#/COMP4
70	P65	I/O	A12/IRQ9/AN211/CMPC53/DA1
71	P64	I/O	A13/IRQ8/AN210/CMPC33/DA0

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
72	AVCC2	Power	-
73	AVSS2	Power	-
74	P63	I/O	A14/A12/IRQ7/AN209/CMPC23
75	P62	I/O	A15/A13/IRQ6/AN208/CMPC43
76	P61	I/O	A16/A14/IRQ5/AN207/CMPC13
77	P60	I/O	A17/A15/IRQ4/AN206/CMPC03
78	P55	I/O	A18/A16/IRQ3/AN203/CMPC32
79	P54	I/O	A19/A17/IRQ2/AN202/CMPC22
80	P53	I/O	A20/A18/IRQ1/AN201/CMPC12
81	P52	I/O	IRQ0/AN200/CMPC02
82	P47	I/O	AN103
83	P46	Input	AN102/CMPC50/CMPC51
84	P45	Input	AN101/CMPC40/CMPC41
85	P44	Input	AN100/CMPC30/CMPC31
86	PH4	Input	AN107/PGAVSS1
87	P43	I/O	AN003
88	P42	Input	AN002/CMPC20/CMPC21
89	P41	Input	AN001/CMPC10/CMPC11
90	P40	Input	AN000/CMPC00/CMPC01
91	PH0	Input	AN007/PGAVSS0
92	AVCC1	Power	-
93	AVCC0	Power	-
94	AVSS0	Power	-
95	AVSS1	Power	-
96	P82	I/O	ALE/WAIT#/MTIC5U/MTIC5U#/TMO4/SCK6/SCK12/IRQ3/COMP5
97	P81	I/O	CS2#/MTIC5V/MTIC5V#/TMCI4/TXD6/SMOSI6/SSDA6/TXD12/SMOSI12/SSDA12/TXD12/SIOX12/COMP4
98	P80	I/O	CS1#/MTIC5W/MTIC5W#/TMRI4/RXD6/SMISO6/SSCL6/RXD12/SMISO12/SSCL12/RXD12/IRQ5/COMP3
99	P11	I/O	RD#/MTIOC3A/MTCLKC/MTIOC3A#/MTCLKC#/MTIOC9D/GTIOC3B/GTETRGA/GTIOC3B#/GTETRGC/TMO3/POE9#/IRQ1-DS
100	P10	I/O	MTIOC9B/MTCLKD/MTIOC9B#/MTCLKD#/GTETRGB/GTETRGC/GTETRGD/TMRI3/POE12#/CTS6#/RTS6#/SS6#/IRQ0-DS

A.2.4 100-LFQFP (with PGA pseudo-differential input and without USB pin, Enabled for 128KB RAM)

Applicable Part Numbers: R5F566TKADFP#30, R5F566TFADFP#30, R5F566TFEDFP#30, R5F566TKEDFP#30, R5F566TKEGFP#30, R5F566TFEGFP#30, R5F566TKADFP#10, R5F566TFADFP#10, R5F566TFEDFP#10, R5F566TKEDFP#10, R5F566TKEGFP#10.

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
1	PE5	I/O	BCLK/MTIOC9D/MTIOC9D#/GTIOC3A/GTETRGA/GTETRGC/GTETRGD/SCK9/CTS9#/RTS9#/SS9#/IRQ0/ADST0
2	EMLE	Input	-
3	VSS	Power	-
4	UB	Input	P00/A11/MTIOC9A/MTIOC9A#/CACREF/RXD9/SMISO9/SSCL9/RXD12/SMISO12/SSCL12/RXD12/IRQ2/ADST1/COMP0
5	VCL	Power	-
6	MD	Input	FINED
7	P01	I/O	A10/MTIOC9C/MTIOC9C#/GTETRGA/GTETRGA/GTETRGC/GTETRGD/POE12#/TXD9/SMOSI9/SSDA9/TXD12/SMOSI12/SSDA12/TXD12/SIOX12/IRQ4/ADST2/COMP1
8	PE4	I/O	A9/MTCLKC/MTCLKC#/GTETRGA/GTETRGA/GTETRGC/GTETRGD/POE10#/SCK9/IRQ1
9	PE3	I/O	A8/MTCLKD/MTCLKD#/GTETRGA/GTETRGA/GTETRGC/GTETRGD/POE11#/CTS9#/RTS9#/SS9#/IRQ2-DS
10	\RES	Input	-
11	XTAL	Output	P37
12	VSS	Power	-
13	EXTAL	Input	P36
14	VCC	Power	-

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
15	PE2	Input	POE10#/NMI
16	PE1	I/O	WRO#/WR#/MTIOC9D/MTIOC9D#/TMO5/CTS5#/RTS5#/SS5#/CTS12#/RTS12#/SS12#/SSLA3/IRQ15
17	PE0	I/O	WR1#/BC1#/WAIT#/MTIOC9B/MTIOC9B#/TMC1/TMC15/RXD5/SMISO5/SSCL5/SSLA2/CRX0/IRQ7
18	\TRST	Input	PD7/MTIOC9A/MTIOC9A#/GTIOC0A/GTIOC3A/GTIOC0A#/TMR1/TMR15/TXD5/S MOSI5/SSDA5/SSLA1/CTX0/IRQ8
19	TMS	Input	PD6/MTIOC9C/MTIOC9C#/GTIOC0B/GTIOC3B/GTIOC0B#/GTIOC3B#/TMO1/CTS1#/RTS1#/S S1#/CTS11#/RTS11#/SS11#/SSLA0/IRQ5/ADST0
20	TDI	Input	PD5/GTIOC1A/GTETRGA/GTIOC1A#/TMR10/TMR16/RXD1/SMISO1/SSCL1/RXD11/SMISO11/SSCL11/IRQ6
21	TCK	Input	PD4/GTIOC1B/GTETRGA/GTIOC1B#/TMC10/TMC16/SCK1/SCK11/IRQ2
22	TDO	Output	PD3/GTIOC2A/GTETRGC/GTIOC2A#/TMO0/TXD1/SMOSI1/SSDA1/TXD11/SMOSI11/SSDA11
23	TRCLK	Output	PD2/A7/GTIOC2B/GTIOC0A/GTIOC2B#/GTIOC0A#/TMC1/TMO4/SCK5/SCK8/MOSIA
24	TRDATA3	Output	PD1/A6/GTIOC3A/GTIOC0B/GTIOC3A#/GTIOC0B#/TMO2/RXD8/SMISO8/SSCL8/MISOA
25	TRDATA2	Output	PD0/A5/GTIOC3B/GTIOC1A/GTIOC3B#/GTIOC1A#/TMO6/TXD8/SMOSI8/SSDA8/RSPCKA
26	TRDATA1	Output	PB7/A4/GTIOC1B/GTIOC1B#/SCK5/SCK11/SCK12
27	TRDATA0	Output	PB6/A3/GTIOC2A/GTIOC2A#/RXD5/SMISO5/SSCL5/RXD11/SMISO11/SSCL11/RXD12/SMISO 12/SSCL12/RXD12/CRX0/IRQ2
28	TRSYNC	Output	PB5/A2/GTIOC2B/GTIOC2B#/TXD5/SMOSI5/SSDA5/TXD11/SMOSI11/SSDA11/TXD12/SMOSI 12/SSDA12/TXD12/SIOX12/CTX0
29	VCC	Power	-
30	PB4	I/O	A1/GTETRGA/GTETRGA/GTETRGC/GTETRGD/POE8#/CTS5#/RTS5#/SS5#/SCK11/CTS11#/RTS 11#/SS11#/IRQ3-DS
31	VSS	Power	-
32	PB3	I/O	A7/MTIOC0A/MTIOC0A#/CACREF/SCK6/RSPCKA/IRQ9
33	PB2	I/O	A6/MTIOC0B/MTIOC0B#/GTADSM0/TMR10/TXD6/SMOSI6/SSDA6/SDA0/ADSM0
34	PB1	I/O	A5/MTIOC0C/MTIOC0C#/GTADSM1/TMC10/RXD6/SMISO6/SSCL6/SCL0/IRQ4/ADSM1
35	PB0	I/O	A0/A4/BC0#/MTIOC0D/MTIOC0D#/TMO0/TXD6/SMOSI6/SSDA6/CTS11#/RTS11#/SS11#/M OSIA/IRQ8/ADTRG2#
36	PA5	I/O	A3/MTIOC1A/MTIOC1A#/TMC1/RXD6/SMISO6/SSCL6/RXD8/SMISO8/SSCL8/MISOA/IRQ1/ ADTRG1#
37	PA4	I/O	A2/MTIOC1B/MTIOC1B#/TMC17/SCK6/TXD8/SMOSI8/SSDA8/RSPCKA/ADTRG0#
38	PA3	I/O	A1/MTIOC2A/MTIOC2A#/GTADSM0/TMR17/TXD9/SMOSI9/SSDA9/SCK8/SSLA0
39	PA2	I/O	A0/BC0#/MTIOC2B/MTIOC2B#/GTADSM1/TMO7/CTS6#/RTS6#/SS6#/RXD9/SMISO9/SSCL9/ SCK11/SSLA1
40	PA1	I/O	MTIOC6A/MTIOC6A#/TMO4/TXD9/SMOSI9/SSDA9/RXD11/SMISO11/SSCL11/SSLA2/CRX0/I RQ14-DS/ADTRG0#
41	PA0	I/O	MTIOC6C/MTIOC6C#/TMO2/SCK9/TXD11/SMOSI11/SSDA11/SSLA3/CTX0
42	VCC	Power	-
43	P96	I/O	CS0#/WAIT#/GTETRGA/GTETRGA/GTETRGC/GTETRGD/POE4#/CTS8#/RTS8#/SS8#/IRQ4-DS
44	VSS	Power	-
45	P95	I/O	MTIOC6B/MTIOC6B#/GTIOC4A/GTIOC7A/GTIOC4A#/GTIOC7A#
46	P94	I/O	MTIOC7A/MTIOC7A#/GTIOC5A/GTIOC8A/GTIOC5A#/GTIOC8A#
47	P93	I/O	MTIOC7B/MTIOC7B#/GTIOC6A/GTIOC9A/GTIOC6A#/GTIOC9A#
48	P92	I/O	MTIOC6D/MTIOC6D#/GTIOC4B/GTIOC7B/GTIOC4B#/GTIOC7B#
49	P91	I/O	MTIOC7C/MTIOC7C#/GTIOC5B/GTIOC8B/GTIOC5B#/GTIOC8B#
50	P90	I/O	MTIOC7D/MTIOC7D#/GTIOC6B/GTIOC9B/GTIOC6B#/GTIOC9B#
51	P76	I/O	D0 [A0/D0]/MTIOC4D/MTIOC4D#/GTIOC2B/GTIOC6B/GTIOC2B#/GTIOC6B#
52	P75	I/O	D1 [A1/D1]/MTIOC4C/MTIOC4C#/GTIOC1B/GTIOC5B/GTIOC1B#/GTIOC5B#
53	P74	I/O	D2 [A2/D2]/MTIOC3D/MTIOC3D#/GTIOC0B/GTIOC4B/GTIOC0B#/GTIOC4B#
54	P73	I/O	D3 [A3/D3]/MTIOC4B/MTIOC4B#/GTIOC2A/GTIOC6A/GTIOC2A#/GTIOC6A#
55	P72	I/O	D4 [A4/D4]/MTIOC4A/MTIOC4A#/GTIOC1A/GTIOC5A/GTIOC1A#/GTIOC5A#
56	P71	I/O	D5 [A5/D5]/MTIOC3B/MTIOC3B#/GTIOC0A/GTIOC4A/GTIOC0A#/GTIOC4A#
57	P70	I/O	D6 [A6/D6]/GTETRGA/GTETRGA/GTETRGC/GTETRGD/POE0#/CTS9#/RTS9#/SS9#/IRQ5-DS
58	P33	I/O	D7 [A7/D7]/MTIOC3A/MTCLKA/MTIOC3A#/MTCLKA#/GTIOC3B/GTIOC3B#/TMO0/SSLA3/IRQ13-DS

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
59	P32	I/O	D8 [A8/D8]/MTIOC3C/MTCLKB/MTIOC3C#/MTCLKB#/GTIOC3A/GTIOC3A#/TMO6/SSLA2/IRQ12-DS
60	VCC	Power	-
61	P31	I/O	D9 [A9/D9]/MTIOC0A/MTCLKC/MTIOC0A#/MTCLKC#/TMRI6/SSLA1/IRQ6
62	VSS	Power	-
63	P30	I/O	D10 [A10/D10]/MTIOC0B/MTCLKD/MTIOC0B#/MTCLKD#/TMCI6/SCK8/CTS8#/RTS8#/SS8#/SSLA0/IRQ7/COMP3
64	P27	I/O	CS3/MTIOC1A/MTIOC0C/MTIOC1A#/MTIOC0C#/POE9#/IRQ15
65	P24	I/O	D11 [A11/D11]/MTIC5U/MTIC5U#/TMCI2/TMO6/CTS8#/RTS8#/SS8#/SCK8/RSPCKA/IRQ4/COMP0
66	P23	I/O	D12 [A12/D12]/MTIC5V/MTIC5V#/TMO2/CACREF/TXD8/SMOSI8/SSDA8/TXD12/SMOSI12/SSDA12/TXDX12/SIOX12/MOSIA/CTX0/IRQ11/COMP1
67	P22	I/O	D13 [A13/D13]/MTIC5W/MTCLKD/MTIC5W#/MTCLKD#/MTIOC9B/TMRI2/TMO4/RXD8/SMISO8/SSCL8/RXD12/SMISO12/SSCL12/RDX12/MISOA/CRX0/IRQ10/ADTRG2#/COMP2
68	P21	I/O	D14 [A14/D14]/MTIOC9A/MTCLKA/MTIOC9A#/MTCLKA#/TMCI4/TXD8/SMOSI8/SSDA8/TXD12/SMOSI12/SSDA12/TXDX12/SIOX12/MOSIA/IRQ6-DS/AN217/ADTRG1#/COMP5
69	P20	I/O	D15 [A15/D15]/MTIOC9C/MTCLKB/MTIOC9C#/MTCLKB#/TMRI4/CTS8#/RTS8#/SS8#/SCK8/RSPCKA/IRQ7-DS/AN216/ADTRG0#/COMP4
70	P65	I/O	A12/IRQ9/AN211/CMPC53/DA1
71	P64	I/O	A13/IRQ8/AN210/CMPC33/DA0
72	AVCC2	Power	-
73	AVSS2	Power	-
74	P63	I/O	A12/A14/IRQ7/AN209/CMPC23
75	P62	I/O	A13/A15/IRQ6/AN208/CMPC43
76	P61	I/O	A14/A16/IRQ5/AN207/CMPC13
77	P60	I/O	A15/A17/IRQ4/AN206/CMPC03
78	P55	I/O	A16/A18/IRQ3/AN203/CMPC32
79	P54	I/O	A17/A19/IRQ2/AN202/CMPC22
80	P53	I/O	A18/A20/IRQ1/AN201/CMPC12
81	P52	I/O	IRQ0/AN200/CMPC02
82	P47	I/O	AN103
83	P46	Input	AN102/CMPC50/CMPC51
84	P45	Input	AN101/CMPC40/CMPC41
85	P44	Input	AN100/CMPC30/CMPC31
86	PH4	Input	AN107/PGAVSS1
87	P43	I/O	AN003
88	P42	Input	AN002/CMPC20/CMPC21
89	P41	Input	AN001/CMPC10/CMPC11
90	P40	Input	AN000/CMPC00/CMPC01
91	PH0	Input	AN007/PGAVSS0
92	AVCC1	Power	-
93	AVCC0	Power	-
94	AVSS0	Power	-
95	AVSS1	Power	-
96	P82	I/O	ALE/WAIT#/MTIC5U/MTIC5U#/TMO4/SCK6/SCK12/IRQ3/COMP5
97	P81	I/O	CS2#/MTIC5V/MTIC5V#/TMCI4/TXD6/SMOSI6/SSDA6/TXD12/SMOSI12/SSDA12/TXDX12/SIOX12/COMP4
98	P80	I/O	CS1#/MTIC5W/MTIC5W#/TMRI4/RXD6/SMISO6/SSCL6/RXD12/SMISO12/SSCL12/RDX12/IRQ5/COMP3
99	P11	I/O	RD#/MTIOC3A/MTCLKC/MTIOC3A#/MTCLKC#/MTIOC9D/GTIOC3B/GTETRGA/GTIOC3B#/GTETRGC/TMO3/POE9#/IRQ1-DS
100	P10	I/O	MTIOC9B/MTCLKD/MTIOC9B#/MTCLKD#/GTETRGB/GTETRGD/TMRI3/POE12#/CTS6#/RTS6#/SS6#/IRQ0-DS

A.2.5 100-LFQFP (with PGA pseudo-differential input and without USB pin, 64KB RAM)

Applicable Part Numbers: R5F566TEADFP#30, R5F566TEEDFP#30, R5F566TAADFP#30, R5F566TAEDFP#30, R5F566TAEGFP#30, R5F566TEEGFP#30, R5F566TAAGFP#30, R5F566TEADFP#10, R5F566TEEDFP#10, R5F566TAEDFP#10, R5F566TAADFP#10.

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
1	PE5	I/O	BCLK/MTIOC9D/MTIOC9D#/GTIOC3A/GTETRGB/GTIOC3A#/GTETRGD/SCK9/CTS9#/RTS9#/SS9#/IRQ0/ADST0
2	EMLE	Input	-
3	VSS	Power	-
4	UB	Input	P00/A11/MTIOC9A/MTIOC9A#/CACREF/RXD9/SMISO9/SSCL9/RXD12/SMISO12/SSCL12/RDX12/IRQ2/ADST1/COMP0
5	VCL	Power	-
6	MD	Input	FINED
7	P01	I/O	A10/MTIOC9C/MTIOC9C#/GTETRGA/GTETRGB/GTETRGD/POE12#/TXD9/SMOSI9/SSDA9/TXD12/SMOSI12/SSDA12/TXD12/SIOX12/IRQ4/ADST2/COMP1
8	PE4	I/O	A9/MTCLKC/MTCLKC#/GTETRGA/GTETRGB/GTETRGD/POE10#/SCK9/IRQ1
9	PE3	I/O	A8/MTCLKD/MTCLKD#/GTETRGA/GTETRGB/GTETRGD/POE11#/CTS9#/RTS9#/SS9#/IRQ2-DS
10	\RES	Input	-
11	XTAL	Output	P37
12	VSS	Power	-
13	EXTAL	Input	P36
14	VCC	Power	-
15	PE2	Input	POE10#/NMI
16	PE1	I/O	WR0#/WR#/MTIOC9D/MTIOC9D#/TMO5/CTS5#/RTS5#/SS5#/CTS12#/RTS12#/SS12#/SSLA3/IRQ15
17	PE0	I/O	WR1#/BC1#/WAIT#/MTIOC9B/MTIOC9B#/TMC1/TMC15/RXD5/SMISO5/SSCL5/SSLA2/CRX0/IRQ7
18	\TRST	Input	PD7/MTIOC9A/MTIOC9A#/GTIOC0A/GTIOC3A/GTIOC0A#/GTIOC3A#/TMR1/TMR15/TXD5/SMOSI5/SSDA5/SSLA1/CTX0/IRQ8
19	TMS	Input	PD6/MTIOC9C/MTIOC9C#/GTIOC0B/GTIOC3B/GTIOC0B#/TMO1/CTS1#/RTS1#/SS1#/CTS11#/RTS11#/SS11#/SSLA0/IRQ5/ADST0
20	TDI	Input	PD5/GTIOC1A/GTETRGA/GTIOC1A#/TMR10/TMR16/RXD1/SMISO1/SSCL1/RXD11/SMISO11/SSCL11/IRQ6
21	TCK	Input	PD4/GTIOC1B/GTETRGA/GTIOC1B#/TMC10/TMC16/SCK1/SCK11/IRQ2
22	TDO	Output	PD3/GTIOC2A/GTETRGD/GTIOC2A#/TMO0/TXD1/SMOSI1/SSDA1/TXD11/SMOSI11/SSDA11
23	TRCLK	Output	PD2/A7/GTIOC2B/GTIOC0A/GTIOC2B#/GTIOC0A#/TMC1/TMO4/SCK5/SCK8/MOSIA
24	TRDATA3	Output	PD1/A6/GTIOC3A/GTIOC0B/GTIOC3A#/GTIOC0B#/TMO2/RXD8/SMISO8/SSCL8/MISOA
25	TRDATA2	Output	PD0/A5/GTIOC3B/GTIOC1A/GTIOC3B#/GTIOC1A#/TMO6/TXD8/SMOSI8/SSDA8/RSPCKA
26	TRDATA1	Output	PB7/A4/GTIOC1B/GTIOC1B#/SCK5/SCK11/SCK12
27	TRDATA0	Output	PB6/A3/GTIOC2A/GTIOC2A#/RXD5/SMISO5/SSCL5/RXD11/SMISO11/SSCL11/RXD12/SMISO12/SSCL12/RXD12/CRX0/IRQ2
28	TRSYNC	Output	PB5/A2/GTIOC2B/GTIOC2B#/TXD5/SMOSI5/SSDA5/TXD11/SMOSI11/SSDA11/TXD12/SMOSI12/SSDA12/TXD12/SIOX12/CTX0
29	VCC	Power	-
30	PB4	I/O	A1/GTETRGA/GTETRGA/GTETRGD/POE8#/CTS5#/RTS5#/SS5#/SCK11/CTS11#/RTS11#/SS11#/IRQ3-DS
31	VSS	Power	-
32	PB3	I/O	MTIOC0A/MTIOC0A#/CACREF/SCK6/RSPCKA/IRQ9
33	PB2	I/O	MTIOC0B/MTIOC0B#/GTADSM0/TMR10/TXD6/SMOSI6/SSDA6/SDA0/ADSM0
34	PB1	I/O	MTIOC0C/MTIOC0C#/GTADSM1/TMC10/RXD6/SMISO6/SSCL6/SCL0/IRQ4/ADSM1
35	PB0	I/O	A0/BC0#/MTIOC0D/MTIOC0D#/TMO0/TXD6/SMOSI6/SSDA6/CTS11#/RTS11#/SS11#/MOSIA/IRQ8/ADTRG2#
36	PA5	I/O	MTIOC1A/MTIOC1A#/TMC13/RXD6/SMISO6/SSCL6/RXD8/SMISO8/SSCL8/MISOA/IRQ1/ADTRG1#
37	PA4	I/O	MTIOC1B/MTIOC1B#/TMC17/SCK6/TXD8/SMOSI8/SSDA8/RSPCKA/ADTRG0#

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
38	PA3	I/O	MTIOC2A/MTIOC2A#/GTADSM0/TMRI7/TXD9/SMOSI9/SSDA9/SCK8/SSLA0
39	PA2	I/O	A0/BC0#/MTIOC2B/MTIOC2B#/GTADSM1/TMO7/CTS6#/RTS6#/SS6#/RXD9/SMISO9/SSCL9/SCK11*1/SSLA1
40	PA1	I/O	MTIOC6A/MTIOC6A#/TMO4/TXD9/SMOSI9/SSDA9/RXD11/SMISO11/SSCL11/SSLA2/CRX0/IRQ14-DS/ADTRG0#
41	PA0	I/O	MTIOC6C/MTIOC6C#/TMO2/SCK9/TXD11/SMOSI11/SSDA11/SSLA3/CTX0
42	VCC	Power	-
43	P96	I/O	CS0#/WAIT#/GTETRGA/GTETRGA/GTETRGC/GTETRGC/POE4#/CTS8#/RTS8#/SS8#/IRQ4-DS
44	VSS	Power	-
45	P95	I/O	MTIOC6B/MTIOC6B#/GTIOC4A/GTIOC7A/GTIOC4A#/GTIOC7A#
46	P94	I/O	MTIOC7A/MTIOC7A#/GTIOC5A/GTIOC8A/GTIOC5A#/GTIOC8A#
47	P93	I/O	MTIOC7B/MTIOC7B#/GTIOC6A/GTIOC9A/GTIOC6A#/GTIOC9A#
48	P92	I/O	MTIOC6D/MTIOC6D#/GTIOC4B/GTIOC7B/GTIOC4B#/GTIOC7B#
49	P91	I/O	MTIOC7C/MTIOC7C#/GTIOC5B/GTIOC8B/GTIOC5B#/GTIOC8B#
50	P90	I/O	MTIOC7D/MTIOC7D#/GTIOC6B/GTIOC9B/GTIOC6B#/GTIOC9B#
51	P76	I/O	D0 [A0/D0]/MTIOC4D/MTIOC4D#/GTIOC2B/GTIOC6B/GTIOC2B#/GTIOC6B#
52	P75	I/O	D1 [A1/D1]/MTIOC4C/MTIOC4C#/GTIOC1B/GTIOC5B/GTIOC1B#/GTIOC5B#
53	P74	I/O	D2 [A2/D2]/MTIOC3D/MTIOC3D#/GTIOC0B/GTIOC4B/GTIOC0B#/GTIOC4B#
54	P73	I/O	D3 [A3/D3]/MTIOC4B/MTIOC4B#/GTIOC2A/GTIOC6A/GTIOC2A#/GTIOC6A#
55	P72	I/O	D4 [A4/D4]/MTIOC4A/MTIOC4A#/GTIOC1A/GTIOC5A/GTIOC1A#/GTIOC5A#
56	P71	I/O	D5 [A5/D5]/MTIOC3B/MTIOC3B#/GTIOC0A/GTIOC4A/GTIOC0A#/GTIOC4A#
57	P70	I/O	D6 [A6/D6]/GTETRGA/GTETRGA/GTETRGC/GTETRGC/POE0#/CTS9#/RTS9#/SS9#/IRQ5-DS
58	P33	I/O	D7 [A7/D7]/MTIOC3A/MTCLKA/MTIOC3A#/MTCLKA#/GTIOC3B/GTIOC3B#/TMO0/SSLA3/IRQ13-DS
59	P32	I/O	D8 [A8/D8]/MTIOC3C/MTCLKB/MTIOC3C#/MTCLKB#/GTIOC3A/GTIOC3A#/TMO6/SSLA2/IRQ12-DS
60	VCC	Power	-
61	P31	I/O	D9 [A9/D9]/MTIOC0A/MTCLKC/MTIOC0A#/MTCLKC#/TMRI6/SSLA1/IRQ6
62	VSS	Power	-
63	P30	I/O	D10 [A10/D10]/MTIOC0B/MTCLKD/MTIOC0B#/MTCLKD#/TMCI6/SCK8/CTS8#/RTS8#/SS8#/SSLA0/IRQ7/COMP3
64	P27	I/O	MTIOC1A/MTIOC0C/MTIOC1A#/MTIOC0C#/POE9#/IRQ15
65	P24	I/O	D11 [A11/D11]/MTIC5U/MTIC5U#/TMCI2/TMO6/CTS8#/RTS8#/SS8#/SCK8/RSPCKA/IRQ4/COMP0
66	P23	I/O	D12 [A12/D12]/MTIC5V/MTIC5V#/TMO2/CACREF/TXD8/SMOSI8/SSDA8/TXD12/SMOSI12/SSDA12/TDX12/SIOX12/MOSIA/CTX0/IRQ11/COMP1
67	P22	I/O	D13 [A13/D13]/MTIC5W/MTCLKD/MTIC5W#/MTCLKD#/MTIOC9B/TMRI2/TMO4/RXD8/SMISO8/SSCL8/RXD12/SMISO12/SSCL12/RXD12/MISOA/CRX0/IRQ10/ADTRG2#/COMP2
68	P21	I/O	D14 [A14/D14]/MTIOC9A/MTCLKA/MTIOC9A#/MTCLKA#/TMCI4/TXD8/SMOSI8/SSDA8/TXD12/SMOSI12/SSDA12/TDX12/SIOX12/MOSIA/IRQ6-DS/AN217/ADTRG1#/COMP5
69	P20	I/O	D15 [A15/D15]/MTIOC9C/MTCLKB/MTIOC9C#/MTCLKB#/TMRI4/CTS8#/RTS8#/SS8#/SCK8/RSPCKA/IRQ7-DS/AN216/ADTRG0#/COMP4
70	P65	I/O	A12/IRQ9/AN211/CMPC53/DA1
71	P64	I/O	A13/IRQ8/AN210/CMPC33/DA0
72	AVCC2	Power	-
73	AVSS2	Power	-
74	P63	I/O	A14/IRQ7/AN209/CMPC23
75	P62	I/O	A15/IRQ6/AN208/CMPC43
76	P61	I/O	A16/IRQ5/AN207/CMPC13
77	P60	I/O	A17/IRQ4/AN206/CMPC03
78	P55	I/O	A18/IRQ3/AN203/CMPC32
79	P54	I/O	A19/IRQ2/AN202/CMPC22
80	P53	I/O	A20/IRQ1/AN201/CMPC12
81	P52	I/O	IRQ0/AN200/CMPC02
82	P47	I/O	AN103
83	P46	Input	AN102/CMPC50/CMPC51
84	P45	Input	AN101/CMPC40/CMPC41

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
85	P44	Input	AN100/CMPC30/CMPC31
86	PH4	Input	AN107/PGAVSS1
87	P43	I/O	AN003
88	P42	Input	AN002/CMPC20/CMPC21
89	P41	Input	AN001/CMPC10/CMPC11
90	P40	Input	AN000/CMPC00/CMPC01
91	PH0	Input	AN007/PGAVSS0
92	AVCC1	Power	-
93	AVCC0	Power	-
94	AVSS0	Power	-
95	AVSS1	Power	-
96	P82	I/O	ALE/WAIT#/MTIC5U/MTIC5U#/TMO4/SCK6/SCK12/IRQ3/COMP5
97	P81	I/O	CS2#/MTIC5V/MTIC5V#/TMCI4/TXD6/SMOSI6/SSDA6/TXD12/SMOSI12/SSDA12/TXDX12/SIOX12/COMP4
98	P80	I/O	CS1#/MTIC5W/MTIC5W#/TMRI4/RXD6/SMISO6/SSCL6/RXD12/SMISO12/SSCL12/RXDX12/IRQ5/COMP3
99	P11	I/O	RD#/MTIOC3A/MTCLKC/MTIOC3A#/MTCLKC#/MTIOC9D/GTIOC3B/GTETRGA/GTIOC3B#/GTETRGC/TMO3/POE9#/IRQ1-DS
100	P10	I/O	MTIOC9B/MTCLKD/MTIOC9B#/MTCLKD#/GTETRGB/GTETRGD/TMRI3/POE12#/CTS6#/RTS6#/SS6#/IRQ0-DS

A.2.6 100-LFQFP (without PGA pseudo-differential input and without USB pin,128KB RAM)

Applicable Part Numbers: R5F566TKFDFP#30, R5F566TFBDFP#30, R5F566TFFDFP#30, R5F566TKBDFP#30, R5F566TKBGF#30, R5F566TKFGFP#30, R5F566TFBGF#30, R5F566TFFGF#30, R5F566TKFDFP#10, R5F566TKBDFP#10, R5F566TFBDFP#10, R5F566TFFDFP#10.

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
1	PE5	I/O	BCLK/MTIOC9D/MTIOC9D#/GTIOC3A/GTETRGB/GTIOC3A#/GTETRGD/SCK9/CTS9#/RTS9#/SS9#/IRQ0/ADST0
2	EMLE	Input	-
3	VSS	Power	-
4	UB	Input	P00/A11/MTIOC9A/MTIOC9A#/CACREF/RXD9/SMISO9/SSCL9/RXD12/SMISO12/SSCL12/RXDX12/IRQ2/ADST1/COMP0
5	VCL	Power	-
6	MD	Input	FINED
7	P01	I/O	A10/MTIOC9C/MTIOC9C#/GTETRGA/GTETRGB/GTETRGC/GTETRGD/POE12#/TXD9/SMOSI9/SSDA9/TXD12/SMOSI12/SSDA12/TXDX12/SIOX12/IRQ4/ADST2/COMP1
8	PE4	I/O	A9/MTCLKC/MTCLKC#/GTETRGA/GTETRGB/GTETRGC/GTETRGD/POE10#/SCK9/IRQ1
9	PE3	I/O	A8/MTCLKD/MTCLKD#/GTETRGA/GTETRGB/GTETRGC/GTETRGD/POE11#/CTS9#/RTS9#/SS9#/IRQ2-DS
10	\RES	Input	-
11	XTAL	Output	P37
12	VSS	Power	-
13	EXTAL	Input	P36
14	VCC	Power	-
15	PE2	Input	POE10#/NMI
16	PE1	I/O	WR0#/WR#/MTIOC9D/MTIOC9D#/TMO5/CTS5#/RTS5#/SS5#/CTS12#/RTS12#/SS12#/SSLA3/IRQ15
17	PE0	I/O	WR1#/BC1#/WAIT#/MTIOC9B/MTIOC9B#/TMCI1/TMCI5/RXD5/SMISO5/SSCL5/SSLA2/CRX0/IRQ7
18	\TRST	Input	PD7/MTIOC9A/MTIOC9A#/GTIOC0A/GTIOC3A/GTIOC0A#/GTIOC3A#/TMRI1/TMRI5/TXD5/SMOSI5/SSDA5/SSLA1/CTX0/IRQ8
19	TMS	Input	PD6/MTIOC9C/MTIOC9C#/GTIOC0B/GTIOC3B/GTIOC0B#/GTIOC3B#/TMO1/CTS1#/RTS1#/SS1#/CTS11#/RTS11#/SS11#/SSLA0/IRQ5/ADST0

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
20	TDI	Input	PD5/GTIOC1A/GTETRGA/GTIOC1A#/TMRI0/TMRI6/RXD1/SMISO1/SSCL1/RXD11/SMISO11/SSCL11/IRQ6
21	TCK	Input	PD4/GTIOC1B/GTETRGB/GTIOC1B#/TMCI0/TMCI6/SCK1/SCK11/IRQ2
22	TDO	Output	PD3/GTIOC2A/GTETRG/GTIOC2A#/TMO0/TXD1/SMOSI1/SSDA1/TXD11/SMOSI11/SSDA11
23	TRCLK	Output	PD2/A7/GTIOC2B/GTIOC0A/GTIOC2B#/GTIOC0A#/TMCI1/TMO4/SCK5/SCK8/MOSIA
24	TRDATA3	Output	PD1/A6/GTIOC3A/GTIOC0B/GTIOC3A#/GTIOC0B#/TMO2/RXD8/SMISO8/SSCL8/MISOA
25	TRDATA2	Output	PD0/A5/GTIOC3B/GTIOC1A/GTIOC3B#/GTIOC1A#/TMO6/TXD8/SMOSI8/SSDA8/RSPCKA
26	TRDATA1	Output	PB7/A4/GTIOC1B/GTIOC1B#/SCK5/SCK11/SCK12
27	TRDATA0	Output	PB6/A3/GTIOC2A/GTIOC2A#/RXD5/SMISO5/SSCL5/RXD11/SMISO11/SSCL11/RXD12/SMISO12/SSCL12/RXD12/CRX0/IRQ2
28	TRSYNC	Output	PB5/A2/GTIOC2B/GTIOC2B#/TXD5/SMOSI5/SSDA5/TXD11/SMOSI11/SSDA11/TXD12/SMOSI12/SSDA12/TXD12/SIOX12/CTX0
29	VCC	Power	-
30	PB4	I/O	A1/GTETRGA/GTETRGB/GTETRG/GTETRGD/POE8#/CTS5#/RTS5#/SS5#/SCK11/CTS11#/RTS11#/SS11#/IRQ3-DS
31	VSS	Power	-
32	PB3	I/O	A7/MTIOC0A/MTIOC0A#/CACREF/SCK6/RSPCKA/IRQ9
33	PB2	I/O	A6/MTIOC0B/MTIOC0B#/GTADSM0/TMRI0/TXD6/SMOSI6/SSDA6/SDA0/ADSM0
34	PB1	I/O	A5/MTIOC0C/MTIOC0C#/GTADSM1/TMCI0/RXD6/SMISO6/SSCL6/SCL0/IRQ4/ADSM1
35	PB0	I/O	A0/A4/BC0#/MTIOC0D/MTIOC0D#/TMO0/TXD6/SMOSI6/SSDA6/CTS11#/RTS11#/SS11#/MOSIA/IRQ8/ADTRG2#
36	PA5	I/O	A3/MTIOC1A/MTIOC1A#/TMCI3/RXD6/SMISO6/SSCL6/RXD8/SMISO8/SSCL8/MISOA/IRQ1/ADTRG1#
37	PA4	I/O	A2/MTIOC1B/MTIOC1B#/TMCI7/SCK6/TXD8/SMOSI8/SSDA8/RSPCKA/ADTRG0#
38	PA3	I/O	A1/MTIOC2A/MTIOC2A#/GTADSM0/TMRI7/TXD9/SMOSI9/SSDA9/SCK8/SSLA0
39	PA2	I/O	A0/BC0#/MTIOC2B/MTIOC2B#/GTADSM1/TMO7/CTS6#/RTS6#/SS6#/RXD9/SMISO9/SSCL9/SCK11/SSLA1
40	PA1	I/O	MTIOC6A/MTIOC6A#/TMO4/TXD9/SMOSI9/SSDA9/RXD11/SMISO11/SSCL11/SSLA2/CRX0/IRQ14-DS/ADTRG0#
41	PA0	I/O	MTIOC6C/MTIOC6C#/TMO2/SCK9/TXD11/SMOSI11/SSDA11/SSLA3/CTX0
42	VCC	Power	-
43	P96	I/O	CS0#/WAIT#/GTETRGA/GTETRGB/GTETRG/GTETRGD/POE4#/CTS8#/RTS8#/SS8#/IRQ4-DS
44	VSS	Power	-
45	P95	I/O	MTIOC6B/MTIOC6B#/GTIOC4A/GTIOC7A/GTIOC4A#/GTIOC7A#
46	P94	I/O	MTIOC7A/MTIOC7A#/GTIOC5A/GTIOC8A/GTIOC5A#/GTIOC8A#
47	P93	I/O	MTIOC7B/MTIOC7B#/GTIOC6A/GTIOC9A/GTIOC6A#/GTIOC9A#
48	P92	I/O	MTIOC6D/MTIOC6D#/GTIOC4B/GTIOC7B/GTIOC4B#/GTIOC7B#
49	P91	I/O	MTIOC7C/MTIOC7C#/GTIOC5B/GTIOC8B/GTIOC5B#/GTIOC8B#
50	P90	I/O	MTIOC7D/MTIOC7D#/GTIOC6B/GTIOC9B/GTIOC6B#/GTIOC9B#
51	P76	I/O	D0 [A0/D0]/MTIOC4D/MTIOC4D#/GTIOC2B/GTIOC6B/GTIOC2B#/GTIOC6B#
52	P75	I/O	D1 [A1/D1]/MTIOC4C/MTIOC4C#/GTIOC1B/GTIOC5B/GTIOC1B#/GTIOC5B#
53	P74	I/O	D2 [A2/D2]/MTIOC3D/MTIOC3D#/GTIOC0B/GTIOC4B/GTIOC0B#/GTIOC4B#
54	P73	I/O	D3 [A3/D3]/MTIOC4B/MTIOC4B#/GTIOC2A/GTIOC6A/GTIOC2A#/GTIOC6A#
55	P72	I/O	D4 [A4/D4]/MTIOC4A/MTIOC4A#/GTIOC1A/GTIOC5A/GTIOC1A#/GTIOC5A#
56	P71	I/O	D5 [A5/D5]/MTIOC3B/MTIOC3B#/GTIOC0A/GTIOC4A/GTIOC0A#/GTIOC4A#
57	P70	I/O	D6 [A6/D6]/GTETRGA/GTETRGB/GTETRG/GTETRGD/POE0#/CTS9#/RTS9#/SS9#/IRQ5-DS
58	P33	I/O	D7 [A7/D7]/MTIOC3A/MTCLKA/MTIOC3A#/MTCLKA#/GTIOC3B/GTIOC3B#/TMO0/SSLA3/IRQ13-DS
59	P32	I/O	D8 [A8/D8]/MTIOC3C/MTCLKB/MTIOC3C#/MTCLKB#/GTIOC3A/GTIOC3A#/TMO6/SSLA2/IRQ12-DS
60	VCC	Power	-
61	P31	I/O	D9 [A9/D9]/MTIOC0A/MTCLKC/MTIOC0A#/MTCLKC#/TMRI6/SSLA1/IRQ6
62	VSS	Power	-
63	P30	I/O	D10 [A10/D10]/MTIOC0B/MTCLKD/MTIOC0B#/MTCLKD#/TMCI6/SCK8/CTS8#/RTS8#/SS8#/SSLA0/IRQ7/COMP3
64	P24	I/O	D11 [A11/D11]/MTIC5U/MTIC5U#/TMCI2/TMO6/CTS8#/RTS8#/SS8#/SCK8/RSPCKA/IRQ4/COMP0

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
65	P23	I/O	D12 [A12/D12]/MTIC5V/MTIC5V#/TMO2/CACREF/TXD8/SMOSI8/SSDA8/TXD12/SMOSI12/SSDA12/TXDX12/SIOX12/MOSIA/CTX0/IRQ11/COMP1
66	P22	I/O	D13 [A13/D13]/MTIC5W/MTCLKD/MTIC5W#/MTCLKD#/MTIOC9B/TMRI2/TMO4/RXD8/SMISO8/SSCL8/RXD12/SMISO12/SSCL12/RXD12/MISOA/CRX0/IRQ10/ADTRG2#/COMP2
67	P21	I/O	D14 [A14/D14]/MTIOC9A/MTCLKA/MTIOC9A#/MTCLKA#/TMCI4/TXD8/SMOSI8/SSDA8/TXD12/SMOSI12/SSDA12/TXDX12/SIOX12/MOSIA/IRQ6-DS/AN217/ADTRG1#/COMP5
68	P20	I/O	D15 [A15/D15]/MTIOC9C/MTCLKB/MTIOC9C#/MTCLKB#/TMRI4/CTS8#/RTS8#/SS8#/SCK8/RSPCKA/IRQ7-DS/AN216/ADTRG0#/COMP4
69	P65	I/O	A12/IRQ9/AN211/CMPC53/DA1
70	P64	I/O	A13/IRQ8/AN210/CMPC33/DA0
71	AVCC2	Power	-
72	AVCC2	Power	-
73	AVSS2	Power	-
74	P63	I/O	A12/A14/IRQ7/AN209/CMPC23
75	P62	I/O	A13/A15/IRQ6/AN208/CMPC43
76	P61	I/O	A14/A16/IRQ5/AN207/CMPC13
77	P60	I/O	A15/A17/IRQ4/AN206/CMPC03
78	P55	I/O	A16/A18/IRQ3/AN203/CMPC32
79	P54	I/O	A17/A19/IRQ2/AN202/CMPC22
80	P53	I/O	A18/A20/IRQ1/AN201/CMPC12
81	P52	I/O	IRQ0/AN200/CMPC02
82	P51	I/O	AN205/CMPC52
83	P50	I/O	AN204/CMPC42
84	P47	I/O	AN103
85	P46	Input	AN102/CMPC50/CMPC51
86	P45	Input	AN101/CMPC40/CMPC41
87	P44	Input	AN100/CMPC30/CMPC31
88	P43	I/O	AN003
89	P42	Input	AN002/CMPC20/CMPC21
90	P41	Input	AN001/CMPC10/CMPC11
91	P40	Input	AN000/CMPC00/CMPC01
92	AVCC1	Power	-
93	AVCC0	Power	-
94	AVSS0	Power	-
95	AVSS1	Power	-
96	P82	I/O	ALE/WAIT#/MTIC5U/MTIC5U#/TMO4/SCK6/SCK12/IRQ3/COMP5
97	P81	I/O	CS2#/MTIC5V/MTIC5V#/TMCI4/TXD6/SMOSI6/SSDA6/TXD12/SMOSI12/SSDA12/TXDX12/SIOX12/COMP4
98	P80	I/O	CS1#/MTIC5W/MTIC5W#/TMRI4/RXD6/SMISO6/SSCL6/RXD12/SMISO12/SSCL12/RXD12/IRQ5/COMP3
99	P11	I/O	RD#/MTIOC3A/MTCLKC/MTIOC3A#/MTCLKC#/MTIOC9D/GTIOC3B/GTETRGA/GTIOC3B#/GTETRG/CMPC3/POE9#/IRQ1-DS
100	P10	I/O	MTIOC9B/MTCLKD/MTIOC9B#/MTCLKD#/GTETRGA/GTETRGA/TMRI3/POE12#/CTS6#/RTS6#/SS6#/IRQ0-DS

A.2.7 100-LFQFP (without PGA pseudo-differential input and without USB pin, 64KB RAM)

Applicable Part Numbers: R5F566TEBDFP#30, R5F566TEFDFP#30, R5F566TABDFP#30, R5F566TAFDFP#30, R5F566TAFGFP#30, R5F566TEBDFP#10, R5F566TAFDFP#10, R5F566TEFDFP#10, R5F566TABDFP#10.

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
1	PE5	I/O	BCLK/MTIOC9D/MTIOC9D#/GTIOC3A/GTETRGB/GTIOC3A#/GTETRGD/SCK9/CTS9#/RTS9#/SS9#/IRQ0/ADST0
2	EMLE	Input	-
3	VSS	Power	-
Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
4	UB	Input	P00/A11/MTIOC9A/MTIOC9A#/CACREF/RXD9/SMISO9/SSCL9/RXD12/SMISO12/SSCL12/RXDX12/IRQ2/ADST1/COMP0
5	VCL	Power	-
6	MD	Input	FINED
7	P01	I/O	A10/MTIOC9C/MTIOC9C#/GTETRGA/GTETRGB/GTETRGD/POE12#/TXD9/SMOSI9/SSDA9/TXD12/SMOSI12/SSDA12/TXDX12/SIOX12/IRQ4/ADST2/COMP1
8	PE4	I/O	A9/MTCLKC/MTCLKC#/GTETRGA/GTETRGB/GTETRGD/POE10#/SCK9/IRQ1
9	PE3	I/O	A8/MTCLKD/MTCLKD#/GTETRGA/GTETRGB/GTETRGD/POE11#/CTS9#/RTS9#/SS9#/IRQ2-DS
10	\RES	Input	-
11	XTAL	Output	P37
12	VSS	Power	-
13	EXTAL	Input	P36
14	VCC	Power	-
15	PE2	Input	POE10#/NMI
16	PE1	I/O	WR0#/WR#/MTIOC9D/MTIOC9D#/TMO5/CTS5#/RTS5#/SS5#/CTS12#/RTS12#/SS12#/SSLA3/IRQ15
17	PE0	I/O	WR1#/BC1#/WAIT#/MTIOC9B/MTIOC9B#/TMC1/TMC15/RXD5/SMISO5/SSCL5/SSLA2/CRX0/IRQ7
18	\TRST	Input	PD7/MTIOC9A/MTIOC9A#/GTIOC0A/GTIOC3A/GTIOC0A#/GTIOC3A#/TMR1/TMR15/TXD5/SMOSI5/SSDA5/SSLA1/CTX0/IRQ8
19	TMS	Input	PD6/MTIOC9C/MTIOC9C#/GTIOC0B/GTIOC3B/GTIOC0B#/GTIOC3B#/TMO1/CTS1#/RTS1#/SS1#/CTS11#/RTS11#/SS11#/SSLA0/IRQ5/ADST0
20	TDI	Input	PD5/GTIOC1A/GTETRGA/GTIOC1A#/TMR10/TMR16/RXD1/SMISO1/SSCL1/RXD11/SMISO11/SSCL11/IRQ6
21	TCK	Input	PD4/GTIOC1B/GTETRGB/GTIOC1B#/TMC10/TMC16/SCK1/SCK11/IRQ2
22	TDO	Output	PD3/GTIOC2A/GTETRGD/GTIOC2A#/TMO0/TXD1/SMOSI1/SSDA1/TXD11/SMOSI11/SSDA11
23	TRCLK	Output	PD2/A7/GTIOC2B/GTIOC0A/GTIOC2B#/GTIOC0A#/TMC1/TMO4/SCK5/SCK8/MOSIA
24	TRDATA3	Output	PD1/A6/GTIOC3A/GTIOC0B/GTIOC3A#/GTIOC0B#/TMO2/RXD8/SMISO8/SSCL8/MISOA
25	TRDATA2	Output	PD0/A5/GTIOC3B/GTIOC1A/GTIOC3B#/GTIOC1A#/TMO6/TXD8/SMOSI8/SSDA8/RSPCKA
26	TRDATA1	Output	PB7/A4/GTIOC1B/GTIOC1B#/SCK5/SCK11/SCK12
27	TRDATA0	Output	PB6/A3/GTIOC2A/GTIOC2A#/RXD5/SMISO5/SSCL5/RXD11/SMISO11/SSCL11/RXD12/SMISO12/SSCL12/RXD12/CRX0/IRQ2
28	TRSYNC	Output	PB5/A2/GTIOC2B/GTIOC2B#/TXD5/SMOSI5/SSDA5/TXD11/SMOSI11/SSDA11/TXD12/SMOSI12/SSDA12/TXD12/SIOX12/CTX0
29	VCC	Power	-
30	PB4	I/O	A1/GTETRGA/GTETRGB/GTETRGD/POE8#/CTS5#/RTS5#/SS5#/SCK11/CTS11#/RTS11#/SS11#/IRQ3-DS
31	VSS	Power	-
32	PB3	I/O	MTIOC0A/MTIOC0A#/CACREF/SCK6/RSPCKA/IRQ9
33	PB2	I/O	MTIOC0B/MTIOC0B#/GTADSM0/TMR10/TXD6/SMOSI6/SSDA6/SDA0/ADSM0
34	PB1	I/O	MTIOC0C/MTIOC0C#/GTADSM1/TMC10/RXD6/SMISO6/SSCL6/SCL0/IRQ4/ADSM1
35	PB0	I/O	A0/BC0#/MTIOC0D/MTIOC0D#/TMO0/TXD6/SMOSI6/SSDA6/CTS11#/RTS11#/SS11#/MOSIA/IRQ8/ADTRG2#
36	PA5	I/O	MTIOC1A/MTIOC1A#/TMC13/RXD6/SMISO6/SSCL6/RXD8/SMISO8/SSCL8/MISOA/IRQ1/ADTRG1#

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
37	PA4	I/O	MTIOC1B/MTIOC1B#/TMC17/SCK6/TXD8/SMOSI8/SSDA8/RSPCKA/ADTRG0#
38	PA3	I/O	MTIOC2A/MTIOC2A#/GTADSM0/TMRI7/TXD9/SMOSI9/SSDA9/SCK8/SSLA0
39	PA2	I/O	A0/BC0#/MTIOC2B/MTIOC2B#/GTADSM1/TMO7/CTS6#/RTS6#/SS6#/RXD9/SMISO9/SSCL9/SCK11*1/SSLA1
40	PA1	I/O	MTIOC6A/MTIOC6A#/TMO4/TXD9/SMOSI9/SSDA9/RXD11/SMISO11/SSCL11/SSLA2/CRX0/IRQ14-DS/ADTRG0#
41	PA0	I/O	MTIOC6C/MTIOC6C#/TMO2/SCK9/TXD11/SMOSI11/SSDA11/SSLA3/CTX0
42	VCC	Power	-
43	P96	I/O	CS0#/WAIT#/GTETRGA/GTETRGA/GTETRGC/GTETRGC/POE4#/CTS8#/RTS8#/SS8#/IRQ4-DS
44	VSS	Power	-
45	P95	I/O	MTIOC6B/MTIOC6B#/GTIOC4A/GTIOC7A/GTIOC4A#/GTIOC7A#
46	P94	I/O	MTIOC7A/MTIOC7A#/GTIOC5A/GTIOC8A/GTIOC5A#/GTIOC8A#
47	P93	I/O	MTIOC7B/MTIOC7B#/GTIOC6A/GTIOC9A/GTIOC6A#/GTIOC9A#
48	P92	I/O	MTIOC6D/MTIOC6D#/GTIOC4B/GTIOC7B/GTIOC4B#/GTIOC7B#
49	P91	I/O	MTIOC7C/MTIOC7C#/GTIOC5B/GTIOC8B/GTIOC5B#/GTIOC8B#
50	P90	I/O	MTIOC7D/MTIOC7D#/GTIOC6B/GTIOC9B/GTIOC6B#/GTIOC9B#
51	P76	I/O	D0 [A0/D0]/MTIOC4D/MTIOC4D#/GTIOC2B/GTIOC6B/GTIOC2B#/GTIOC6B#
52	P75	I/O	D1 [A1/D1]/MTIOC4C/MTIOC4C#/GTIOC1B/GTIOC5B/GTIOC1B#/GTIOC5B#
53	P74	I/O	D2 [A2/D2]/MTIOC3D/MTIOC3D#/GTIOC0B/GTIOC4B/GTIOC0B#/GTIOC4B#
54	P73	I/O	D3 [A3/D3]/MTIOC4B/MTIOC4B#/GTIOC2A/GTIOC6A/GTIOC2A#/GTIOC6A#
55	P72	I/O	D4 [A4/D4]/MTIOC4A/MTIOC4A#/GTIOC1A/GTIOC5A/GTIOC1A#/GTIOC5A#
56	P71	I/O	D5 [A5/D5]/MTIOC3B/MTIOC3B#/GTIOC0A/GTIOC4A/GTIOC0A#/GTIOC4A#
57	P70	I/O	D6 [A6/D6]/GTETRGA/GTETRGA/GTETRGC/GTETRGC/POE0#/CTS9#/RTS9#/SS9#/IRQ5-DS
58	P33	I/O	D7 [A7/D7]/MTIOC3A/MTCLKA/MTIOC3A#/MTCLKA#/GTIOC3B/GTIOC3B#/TMO0/SSLA3/IRQ13-DS
59	P32	I/O	D8 [A8/D8]/MTIOC3C/MTCLKB/MTIOC3C#/MTCLKB#/GTIOC3A/GTIOC3A#/TMO6/SSLA2/IRQ12-DS
60	VCC	Power	-
61	P31	I/O	D9 [A9/D9]/MTIOC0A/MTCLKC/MTIOC0A#/MTCLKC#/TMRI6/SSLA1/IRQ6
62	VSS	Power	-
63	P30	I/O	D10 [A10/D10]/MTIOC0B/MTCLKD/MTIOC0B#/MTCLKD#/TMC16/SCK8/CTS8#/RTS8#/SS8#/SSLA0/IRQ7/COMP3
64	P24	I/O	D11 [A11/D11]/MTIC5U/MTIC5U#/TMC12/TMO6/CTS8#/RTS8#/SS8#/SCK8/RSPCKA/IRQ4/COMP0
65	P23	I/O	D12 [A12/D12]/MTIC5V/MTIC5V#/TMO2/CACREF/TXD8/SMOSI8/SSDA8/TXD12/SMOSI12/SSDA12/TXDX12/SIOX12/MOSIA/CTX0/IRQ11/COMP1
66	P22	I/O	D13 [A13/D13]/MTIC5W/MTCLKD/MTIC5W#/MTCLKD#/MTIOC9B/TMRI2/TMO4/RXD8/SMISO8/SSCL8/RXD12/SMISO12/SSCL12/RXD12/MISOA/CRX0/IRQ10/ADTRG2#/COMP2
67	P21	I/O	D14 [A14/D14]/MTIOC9A/MTCLKA/MTIOC9A#/MTCLKA#/TMC14/TXD8/SMOSI8/SSDA8/TXD12/SMOSI12/SSDA12/TXDX12/SIOX12/MOSIA/IRQ6-DS/AN217/ADTRG1#/COMP5
68	P20	I/O	D15 [A15/D15]/MTIOC9C/MTCLKB/MTIOC9C#/MTCLKB#/TMRI4/CTS8#/RTS8#/SS8#/SCK8/RSPCKA/IRQ7-DS/AN216/ADTRG0#/COMP4
69	P65	I/O	A12/IRQ9/AN211/CMPC53/DA1
70	P64	I/O	A13/IRQ8/AN210/CMPC33/DA0
71	AVCC2	Power	-
72	AVCC2	Power	-
73	AVSS2	Power	-
74	P63	I/O	A14/IRQ7/AN209/CMPC23
75	P62	I/O	A15/IRQ6/AN208/CMPC43
76	P61	I/O	A16/IRQ5/AN207/CMPC13
77	P60	I/O	A17/IRQ4/AN206/CMPC03
78	P55	I/O	A18/IRQ3/AN203/CMPC32
79	P54	I/O	A19/IRQ2/AN202/CMPC22
80	P53	I/O	A20/IRQ1/AN201/CMPC12
81	P52	I/O	IRQ0/AN200/CMPC02
82	P51	I/O	AN205/CMPC52

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
83	P50	I/O	AN204/CMPC42
84	P47	I/O	AN103
85	P46	Input	AN102/CMPC50/CMPC51
86	P45	Input	AN101/CMPC40/CMPC41
87	P44	Input	AN100/CMPC30/CMPC31
88	P43	I/O	AN003
89	P42	Input	AN002/CMPC20/CMPC21
90	P41	Input	AN001/CMPC10/CMPC11
91	P40	Input	AN000/CMPC00/CMPC01
92	AVCC1	Power	-
93	AVCC0	Power	-
94	AVSS0	Power	-
95	AVSS1	Power	-
96	P82	I/O	ALE/WAIT#/MTIC5U/MTIC5U#/TMO4/SCK6/SCK12/IRQ3/COMP5
97	P81	I/O	CS2#/MTIC5V/MTIC5V#/TMCI4/TXD6/SMOSI6/SSDA6/TXD12/SMOSI12/SSDA12/TXD12/SIOX12/COMP4
98	P80	I/O	CS1#/MTIC5W/MTIC5W#/TMRI4/RXD6/SMISO6/SSCL6/RXD12/SMISO12/SSCL12/RXD12/IRQ5/COMP3
99	P11	I/O	RD#/MTIOC3A/MTCLKC/MTIOC3A#/MTCLKC#/MTIOC9D/GTIOC3B/GTETRGA/GTIOC3B#/GTETRGC/TMO3/POE9#/IRQ1-DS
100	P10	I/O	MTIOC9B/MTCLKD/MTIOC9B#/MTCLKD#/GTETRGB/GTETRGD/TMRI3/POE12#/CTS6#/RTS6#/SS6#/IRQ0-DS

A.2.8 80-LFQFP

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
1	EMLE	Input	-
2	VSS	Power	-
3	UB	Input	P00/MTIOC9A/MTIOC9A#/CACREF/RXD9/SMISO9/SSCL9/RXD12/SMISO12/SSCL12/RXD12/IRQ2/ADST1/COMP0
4	VCL	Power	-
5	MD	Input	FINED
6	P01	I/O	MTIOC9C/MTIOC9C#/GTETRGA/GTETRGA/GTETRGC/GTETRGC/GTETRGD/POE12#/TXD9/SMOSI9/SSDA9/TXD12/SMOSI12/SSDA12/TXD12/SIOX12/IRQ4/ADST2/COMP1
7	PE4	I/O	MTCLKC/MTCLKC#/GTETRGA/GTETRGA/GTETRGC/GTETRGC/GTETRGD/POE10#/SCK9/IRQ1
8	PE3	I/O	MTCLKD/MTCLKD#/GTETRGA/GTETRGA/GTETRGC/GTETRGC/GTETRGD/POE11#/CTS9#/RTS9#/SS9#/IRQ2-DS
9	\RES	Input	-
10	XTAL	Output	P37
11	VSS	Power	-
12	EXTAL	Input	P36
13	VCC	Power	-
14	PE2	Input	POE10#/NMI
15	\TRST	Input	PD7/MTIOC9A/MTIOC9A#/GTIOC0A/GTIOC3A/GTIOC0A#/GTIOC3A#/TMRI1/TMRI5/TXD5/SMOSI5/SSDA5/SSLA1/CTX0/IRQ8
16	TMS	Input	PD6/MTIOC9C/MTIOC9C#/GTIOC0B/GTIOC3B/GTIOC0B#/GTIOC3B#/TMO1/CTS1#/RTS1#/SS1#/CTS11#/RTS11#/SS11#/SSLA0/IRQ5/ADST0
17	TDI	Input	PD5/GTIOC1A/GTETRGA/GTIOC1A#/TMRI0/TMRI6/RXD1/SMISO1/SSCL1/RXD11/SMISO11/SSCL11/IRQ6
18	TCK	Input	PD4/GTIOC1B/GTETRGA/GTIOC1B#/TMCI0/TMCI6/SCK1/SCK11/IRQ2
19	TDO	Output	PD3/GTIOC2A/GTETRGC/GTIOC2A#/TMO0/TXD1/SMOSI1/SSDA1/TXD11/SMOSI11/SSDA11
20	PD2	I/O	GTIOC2B/GTIOC0A/GTIOC2B#/GTIOC0A#/TMCI1/TMO4/SCK5/SCK8/MOSIA

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
21	PB6	I/O	GTIOC2A/GTIOC2A#/RXD5/SMISO5/SSCL5/RXD11/SMISO11/SSCL11/RXD12/SMISO12/SSCL12/RXDX12/CRX0/IRQ2
22	PB5	I/O	GTIOC2B/GTIOC2B#/TXD5/SMOSI5/SSDA5/TXD11/SMOSI11/SSDA11/TXD12/SMOSI12/SSDA12/TXDX12/SIOX12/CTX0
23	VCC	Power	-
24	PB4	I/O	GTETRGA/GTETRGA#/GTETRGD/POE8#/RTS5#/SS5#/SCK11/CTS11#/RTS11#/SS11#/IRQ3-DS
25	VSS	Power	-
26	PB3	I/O	MTIOC0A/MTIOC0A#/CACREF/SCK6/RSPCKA/IRQ9
27	PB2	I/O	MTIOC0B/MTIOC0B#/GTADSM0/TMRI0/TXD6/SMOSI6/SSDA6/SDA0/ADSM0
28	PB1	I/O	MTIOC0C/MTIOC0C#/GTADSM1/TMRI0/RXD6/SMISO6/SSCL6/SCL0/IRQ4/ADSM1
29	PB0	I/O	MTIOC0D/MTIOC0D#/TMO0/TXD6/SMOSI6/SSDA6/CTS11#/RTS11#/SS11#/MOSIA/IRQ8/ADTRG2#
30	PA5	I/O	MTIOC1A/MTIOC1A#/TMCI3/RXD6/SMISO6/SSCL6/RXD8/SMISO8/SSCL8/MISOA/IRQ1/ADTRG1#
31	PA3	I/O	MTIOC2A/MTIOC2A#/GTADSM0/TMRI7/TXD9/SMOSI9/SSDA9/SCK8/SSLA0
32	VCC	Power	-
33	P96	I/O	GTETRGA/GTETRGA#/GTETRGD/POE4#/CTS8#/RTS8#/SS8#/IRQ4-DS
34	VSS	Power	-
35	P95	I/O	MTIOC6B/MTIOC6B#/GTIOC4A/GTIOC7A/GTIOC4A#/GTIOC7A#
36	P94	I/O	MTIOC7A/MTIOC7A#/GTIOC5A/GTIOC8A/GTIOC5A#/GTIOC8A#
37	P93	I/O	MTIOC7B/MTIOC7B#/GTIOC6A/GTIOC9A/GTIOC6A#/GTIOC9A#
38	P92	I/O	MTIOC6D/MTIOC6D#/GTIOC4B/GTIOC7B/GTIOC4B#/GTIOC7B#
39	P91	I/O	MTIOC7C/MTIOC7C#/GTIOC5B/GTIOC8B/GTIOC5B#/GTIOC8B#
40	P90	I/O	MTIOC7D/MTIOC7D#/GTIOC6B/GTIOC9B/GTIOC6B#/GTIOC9B#
41	P76	I/O	MTIOC4D/MTIOC4D#/GTIOC2B/GTIOC6B/GTIOC2B#/GTIOC6B#
42	P75	I/O	MTIOC4C/MTIOC4C#/GTIOC1B/GTIOC5B/GTIOC1B#/GTIOC5B#
43	P74	I/O	MTIOC3D/MTIOC3D#/GTIOC0B/GTIOC4B/GTIOC0B#/GTIOC4B#
44	P73	I/O	MTIOC4B/MTIOC4B#/GTIOC2A/GTIOC6A/GTIOC2A#/GTIOC6A#
45	P72	I/O	MTIOC4A/MTIOC4A#/GTIOC1A/GTIOC5A/GTIOC1A#/GTIOC5A#
46	P71	I/O	MTIOC3B/MTIOC3B#/GTIOC0A/GTIOC4A/GTIOC0A#/GTIOC4A#
47	P70	I/O	GTETRGA/GTETRGA#/GTETRGD/POE0#/CTS9#/RTS9#/SS9#/IRQ5-DS
48	VCC	Power	-
49	P31	I/O	MTIOC0A/MTCLKC/MTIOC0A#/MTCLKC#/TMRI6/SSLA1/IRQ6
50	VSS	Power	-
51	P30	I/O	MTIOC0B/MTCLKD/MTIOC0B#/MTCLKD#/TMCI6/SCK8/CTS8#/RTS8#/SS8#/SSLA0/IRQ7/COMP3
52	P27	I/O	MTIOC1A/MTIOC0C/MTIOC1A#/MTIOC0C#/POE9#/IRQ15
53	P22	I/O	MTIC5W/MTCLKD/MTIC5W#/MTCLKD#/MTIOC9B/TMRI2/TMO4/RXD8/SMISO8/SSCL8/RXD12/SMISO12/SCL12/RXDX12/MISOA/CRX0/IRQ10/ADTRG2#/COMP2
54	P21	I/O	MTIOC9A/MTCLKA/MTIOC9A#/MTCLKA#/TMCI4/TXD8/SMOSI8/SSDA8/TXD12/SMOSI12/SSDA12/TXDX12/SIOX12/MOSIA/IRQ6-DS/AN217/ADTRG1#/COMP5
55	P20	I/O	MTIOC9C/MTCLKB/MTIOC9C#/MTCLKB#/TMRI4/CTS8#/RTS8#/SS8#/SCK8/RSPCKA/IRQ7-DS/AN216/ADTRG0#/COMP4
56	P65	I/O	IRQ9/AN211/CMPC53/DA1
57	P64	I/O	IRQ8/AN210/CMPC33/DA0
58	AVCC2	Power	-
59	AVSS2	Power	-
60	P62	I/O	IRQ6/AN208/CMPC43
61	P55	I/O	IRQ3/AN203/CMPC32
62	P54	I/O	IRQ2/AN202/CMPC22
63	P53	I/O	IRQ1/AN201/CMPC12
64	P52	I/O	IRQ0/AN200/CMPC02
65	P47	I/O	AN103
66	P46	Input	AN102/CMPC50/CMPC51
67	P45	Input	AN101/CMPC40/CMPC41
68	P44	Input	AN100/CMPC30/CMPC31
69	PH4	Input	AN107/PGAVSS1
70	P43	I/O	AN003

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
71	P42	Input	AN002/CMPC20/CMPC21
72	P41	Input	AN001/CMPC10/CMPC11
73	P40	Input	AN000/CMPC00/CMPC01
74	PH0	Input	AN007/PGAVSS0
75	AVCC1	Power	-
76	AVCC0	Power	-
77	AVSS0	Power	-
78	AVSS1	Power	-
79	P11	I/O	MTIOC3A/MTCLKC/MTIOC3A#/MTCLKC#/MTIOC9D/GTIOC3B/GTETRGA/GTIOC3B#/GTETRGD/TMO3/POE9#/IRQ1-DS
80	P10	I/O	MTIOC9B/MTCLKD/MTIOC9B#/MTCLKD#/GTETRGA/GTETRGC/GTETRGD/TMRI3/POE12#/CTS6#/RTS6#/SS6#/IRQ0-DS

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Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
1	EMLE	Input	-
2	VSS	Power	-
3	UB	Input	P00/MTIOC9A/MTIOC9A#/CACREF/RXD9/SMISO9/SSCL9/RXD12/SMISO12/SSCL12/RXDX12/IRQ2/ADST1/COMP0
4	VCL	Power	-
5	MD	Input	FINED
6	P01	I/O	MTIOC9C/MTIOC9C#/GTETRGA/GTETRGC/GTETRGC/GTETRGC/POE12#/TXD9/SMOSI9/SSDA9/TXD12/SMOSI12/SSDA12/TXD12/SIOX12/IRQ4/ADST2/COMP1
7	PE4	I/O	MTCLKC/MTCLKC#/GTETRGA/GTETRGC/GTETRGC/GTETRGC/POE10#/SCK9/IRQ1
8	PE3	I/O	MTCLKD/MTCLKD#/GTETRGA/GTETRGC/GTETRGC/GTETRGC/POE11#/CTS9#/RTS9#/SS9#/IRQ2-DS
9	\RES	Input	-
10	XTAL	Output	P37
11	VSS	Power	-
12	EXTAL	Input	P36
13	VCC	Power	-
14	PE2	Input	POE10#/NMI
15	\TRST	Input	PD7/MTIOC9A/MTIOC9A#/GTIOC0A/GTIOC3A/GTIOC0A#/GTIOC3A#/TMRI1/TMRI5/TXD5/SMOSI5/SSDA5/SSLA1/CTX0/IRQ8
16	TMS	Input	PD6/MTIOC9C/MTIOC9C#/GTIOC0B/GTIOC3B/GTIOC0B#/GTIOC3B#/TMO1/CTS1#/RTS1#/SS1#/CTS11#/RTS11#/SS11#/SSLA0/IRQ5/ADST0
17	TDI	Input	PD5/GTIOC1A/GTETRGA/GTIOC1A#/TMRI0/TMRI6/RXD1/SMISO1/SSCL1/RXD11/SMISO11/SSCL11/IRQ6
18	TCK	Input	PD4/GTIOC1B/GTETRGA/GTIOC1B#/TMCI0/TMCI6/SCK1/SCK11/IRQ2
19	TDO	Output	PD3/GTIOC2A/GTETRGC/GTIOC2A#/TMO0/TXD1/SMOSI1/SSDA1/TXD11/SMOSI11/SSDA11
20	PD2	I/O	GTIOC2B/GTIOC0A/GTIOC2B#/GTIOC0A#/TMCI1/TMO4/SCK5/SCK8/MOSIA
21	PB6	I/O	GTIOC2A/GTIOC2A#/RXD5/SMISO5/SSCL5/RXD11/SMISO11/SSCL11/RXD12/SMISO12/SSCL12/RXDX12/CTX0/IRQ2
22	PB5	I/O	GTIOC2B/GTIOC2B#/TXD5/SMOSI5/SSDA5/TXD11/SMOSI11/SSDA11/TXD12/SMOSI12/SSDA12/TXDX12/SIOX12/CTX0
23	VCC	Power	-
24	PB4	I/O	GTETRGA/GTETRGC/GTETRGC/GTETRGC/POE8#/CTS5#/RTS5#/SS5#/SCK11/CTS11#/RTS11#/SS11#/IRQ3-DS
25	VSS	Power	-

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
26	PB3	I/O	MTIOC0A/MTIOC0A#/CACREF/SCK6/RSPCKA/IRQ9
27	PB2	I/O	MTIOC0B/MTIOC0B#/GTADSM0/TMRI0/TXD6/SMOSI6/SSDA6/SDA0/ADSM0
28	PB1	I/O	MTIOC0C/MTIOC0C#/GTADSM1/TMCI0/RXD6/SMISO6/SSCL6/SCL0/IRQ4/ADSM1
29	PB0	I/O	MTIOC0D/MTIOC0D#/TMO0/TXD6/SMOSI6/SSDA6/CTS11#/RTS11#/SS11#/MOSIA/IRQ8/ADTRG2#
30	PA5	I/O	MTIOC1A/MTIOC1A#/TMCI3/RXD6/SMISO6/SSCL6/RXD8/SMISO8/SSCL8/MISOA/IRQ1/ADTRG1#
31	PA3	I/O	MTIOC2A/MTIOC2A#/GTADSM0/TMRI7/TXD9/SMOSI9/SSDA9/SCK8/SSLA0
32	VCC	Power	-
33	P96	I/O	GTETRGA/GTETRGB/GTETRGC/GTETRGD/POE4#/CTS8#/RTS8#/SS8#/IRQ4-DS
34	VSS	Power	-
35	P95	I/O	MTIOC6B/MTIOC6B#/GTIOC4A/GTIOC7A/GTIOC4A#/GTIOC7A#
36	P94	I/O	MTIOC7A/MTIOC7A#/GTIOC5A/GTIOC8A/GTIOC5A#/GTIOC8A#
37	P93	I/O	MTIOC7B/MTIOC7B#/GTIOC6A/GTIOC9A/GTIOC6A#/GTIOC9A#
38	P92	I/O	MTIOC6D/MTIOC6D#/GTIOC4B/GTIOC7B/GTIOC4B#/GTIOC7B#
39	P91	I/O	MTIOC7C/MTIOC7C#/GTIOC5B/GTIOC8B/GTIOC5B#/GTIOC8B#
40	P90	I/O	MTIOC7D/MTIOC7D#/GTIOC6B/GTIOC9B/GTIOC6B#/GTIOC9B#
41	P76	I/O	MTIOC4D/MTIOC4D#/GTIOC2B/GTIOC6B/GTIOC2B#/GTIOC6B#
42	P75	I/O	MTIOC4C/MTIOC4C#/GTIOC1B/GTIOC5B/GTIOC1B#/GTIOC5B#
43	P74	I/O	MTIOC3D/MTIOC3D#/GTIOC0B/GTIOC4B/GTIOC0B#/GTIOC4B#
44	P73	I/O	MTIOC4B/MTIOC4B#/GTIOC2A/GTIOC6A/GTIOC2A#/GTIOC6A#
45	P72	I/O	MTIOC4A/MTIOC4A#/GTIOC1A/GTIOC5A/GTIOC1A#/GTIOC5A#
46	P71	I/O	MTIOC3B/MTIOC3B#/GTIOC0A/GTIOC4A/GTIOC0A#/GTIOC4A#
47	P70	I/O	GTETRGA/GTETRGB/GTETRGC/GTETRGD/POE0#/CTS9#/RTS9#/SS9#/IRQ5-DS
48	VCC	Power	-
49	P31	I/O	MTIOC0A/MTCLKC/MTIOC0A#/MTCLKC#/TMRI6/SSLA1/IRQ6
50	VSS	Power	-
51	P30	I/O	MTIOC0B/MTCLKD/MTIOC0B#/MTCLKD#/TMCI6/SCK8/CTS8#/RTS8#/SS8#/SSLA0/IRQ7/COMP3
52	P27	I/O	MTIOC1A/MTIOC0C/MTIOC1A#/MTIOC0C#/POE9#/IRQ15
53	P22	I/O	MTIC5W/MTCLKD/MTIC5W#/MTCLKD#/MTIOC9B/TMRI2/TMO4/RXD8/SMISO8/SSCL8/RXD12/SMISO12/SCL12/RDX12/MISOA/CRX0/IRQ10/ADTRG2#/COMP2
54	P21	I/O	MTIOC9A/MTCLKA/MTIOC9A#/MTCLKA#/TMCI4/TXD8/SMOSI8/SSDA8/TXD12/SMOSI12/SSDA12/TXDX12/SIOX12/MOSIA/IRQ6-DS/AN217/ADTRG1#/COMP5
55	P20	I/O	MTIOC9C/MTCLKB/MTIOC9C#/MTCLKB#/TMRI4/CTS8#/RTS8#/SS8#/SCK8/RSPCKA/IRQ7-DS/AN216/ADTRG0#/COMP4
56	P65	I/O	IRQ9/AN211/CMPC53/DA1
57	P64	I/O	IRQ8/AN210/CMPC33/DA0
58	AVCC2	Power	-
59	AVSS2	Power	-
60	P62	I/O	IRQ6/AN208/CMPC43
61	P55	I/O	IRQ3/AN203/CMPC32
62	P54	I/O	IRQ2/AN202/CMPC22
63	P53	I/O	IRQ1/AN201/CMPC12
64	P52	I/O	IRQ0/AN200/CMPC02
65	P47	I/O	AN103
66	P46	Input	AN102/CMPC50/CMPC51
67	P45	Input	AN101/CMPC40/CMPC41
68	P44	Input	AN100/CMPC30/CMPC31
69	PH4	Input	AN107/PGAVSS1
70	P43	I/O	AN003
71	P42	Input	AN002/CMPC20/CMPC21
72	P41	Input	AN001/CMPC10/CMPC11
73	P40	Input	AN000/CMPC00/CMPC01
74	PH0	Input	AN007/PGAVSS0
75	AVCC1	Power	-
76	AVCC0	Power	-

77	AVSS0	Power	-
78	AVSS1	Power	-
79	P11	I/O	MTIOC3A/MTCLKC/MTIOC3A#/MTCLKC#/MTIOC9D/GTIOC3B/GTETRGA/GTIOC3B#/GTETRGC/TMO3/POE9#/IRQ1-DS
80	P10	I/O	MTIOC9B/MTCLKD/MTIOC9B#/MTCLKD#/GTETRGB/GTETRGD/TMRI3/POE12#/CTS6#/RTS6#/SS6#/IRQ0-DS

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Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
1	EMLE	Input	-
2	UB	Input	P00/MTIOC9A/MTIOC9A#/CACREF/RXD9/SMISO9/SSCL9/RXD12/SMISO12/SSCL12/RXDX12/IRQ2/ADST1/COMPO
3	VCL	Power	-
4	MD	Input	FINED
5	P01	I/O	MTIOC9C/MTIOC9C#/GTETRGA/GTETRGB/GTETRGC/GTETRGD/POE12#/TXD9/SMOSI9/SSDA9/TXD12/SMOSI12/SSDA12/TXDX12/SIOX12/IRQ4/ADST2/COMP1
6	\RES	Input	-
7	XTAL	Output	P37
8	VSS	Power	-
9	EXTAL	Input	P36
10	VCC	Power	-
11	PE2	I/O	POE10#/NMI
12	\TRST	Input	PD7/MTIOC9A/MTIOC9A#/GTIOC0A/GTIOC3A/GTIOC0A#/GTIOC3A#/TMRI1/TMRI5/TXD5/SMOSI5/SSDA5/SSLA1/CTX0/IRQ8
13	TMS	Input	PD6/MTIOC9C/MTIOC9C#/GTIOC0B/GTIOC3B/GTIOC0B#/GTIOC3B#/TMO1/CTS1#/RTS1#/SS1#/CTS11#/RTS11#/SS11#/SSLA0/IRQ5/ADST0
14	TDI	Input	PD5/GTIOC1A/GTETRGA/GTIOC1A#/TMRI0/TMRI6/RXD1/SMISO1/SSCL1/RXD11/SMISO11/SSCL11/IRQ6
15	TCK	Input	PD4/GTIOC1B/GTETRGB/GTIOC1B#/TMCI0/TMCI6/SCK1/SCK11/IRQ2
16	TDO	Output	PD3/GTIOC2A/GTETRGC/GTIOC2A#/TMO0/TXD1/SMOSI1/SSDA1/TXD11/SMOSI11/SSDA11
17	PB6	I/O	GTIOC2A/GTIOC2A#/RXD5/SMISO5/SSCL5/RXD11/SMISO11/SSCL11/RXD12/SMISO12/SSCL12/RXDX12/CTX0/IRQ2
18	PB5	I/O	GTIOC2B/GTIOC2B#/TXD5/SMOSI5/SSDA5/TXD11/SMOSI11/SSDA11/TXD12/SMOSI12/SSDA12/TXDX12/SIOX12/CTX0
19	PB4	I/O	GTETRGA/GTETRGB/GTETRGC/GTETRGD/POE8#/CTS5#/RTS5#/SS5#/SCK11/CTS11#/RTS11#/SS11#/IRQ3-DS
20	PB3	I/O	MTIOC0A/MTIOC0A#/CACREF/SCK6/RSPCKA/IRQ9
21	PB2	I/O	MTIOC0B/MTIOC0B#/GTADSM0/TMRI0/TXD6/SMOSI6/SSDA6/SDA0/ADSM0
22	PB1	I/O	MTIOC0C/MTIOC0C#/GTADSM1/TMCI0/RXD6/SMISO6/SSCL6/SCL0/IRQ4/ADSM1
23	PB0	I/O	MTIOC0D/MTIOC0D#/TMO0/TXD6/SMOSI6/SSDA6/CTS11#/RTS11#/SS11#/MOSIA/IRQ8/ADTRG2#
24	VCC	Power	-
25	P96	I/O	GTETRGA/GTETRGB/GTETRGC/GTETRGD/POE4#/CTS8#/RTS8#/SS8#/IRQ4-DS
26	VSS	Power	-
27	P95	I/O	MTIOC6B/MTIOC6B#/GTIOC4A/GTIOC7A/GTIOC4A#/GTIOC7A#
28	P94	I/O	MTIOC7A/MTIOC7A#/GTIOC5A/GTIOC8A/GTIOC5A#/GTIOC8A#
29	P93	I/O	MTIOC7B/MTIOC7B#/GTIOC6A/GTIOC9A/GTIOC6A#/GTIOC9A#
30	P92	I/O	MTIOC6D/MTIOC6D#/GTIOC4B/GTIOC7B/GTIOC4B#/GTIOC7B#
31	P91	I/O	MTIOC7C/MTIOC7C#/GTIOC5B/GTIOC8B/GTIOC5B#/GTIOC8B#
32	P90	I/O	MTIOC7D/MTIOC7D#/GTIOC6B/GTIOC9B/GTIOC6B#/GTIOC9B#
33	P76	I/O	MTIOC4D/MTIOC4D#/GTIOC2B/GTIOC6B/GTIOC2B#/GTIOC6B#
34	P75	I/O	MTIOC4C/MTIOC4C#/GTIOC1B/GTIOC5B/GTIOC1B#/GTIOC5B#
35	P74	I/O	MTIOC3D/MTIOC3D#/GTIOC0B/GTIOC4B/GTIOC0B#/GTIOC4B#
36	P73	I/O	MTIOC4B/MTIOC4B#/GTIOC2A/GTIOC6A/GTIOC2A#/GTIOC6A#
37	P72	I/O	MTIOC4A/MTIOC4A#/GTIOC1A/GTIOC5A/GTIOC1A#/GTIOC5A#
38	P71	I/O	MTIOC3B/MTIOC3B#/GTIOC0A/GTIOC4A/GTIOC0A#/GTIOC4A#

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
39	P70	I/O	GTETRGA/GTETRGB/GTETRGD/POE0#/CTS9#/RTS9#/SS9#/IRQ5-DS
40	VCC	Power	-
41	VSS	Power	-
42	P22	I/O	MTIC5W/MTCLKD/MTIC5W#/MTCLKD#/MTIOC9B/TMRI2/TMO4/RXD8/SMISO8/SSCL8/RXD12/SMISO12/SCL12/RDX12/MISOA/CRX0/IRQ10/ADTRG2#/COMP2
43	P21	I/O	MTIOC9A/MTCLKA/MTIOC9A#/MTCLKA#/TMCI4/TXD8/SMOSI8/SSDA8/TXD12/SMOSI12/SSDA12/TXD12/SIOX12/MOSIA/IRQ6-DS/AN217/ADTRG1#/COMP5
44	P20	I/O	MTIOC9C/MTCLKB/MTIOC9C#/MTCLKB#/TMRI4/CTS8#/RTS8#/SS8#/SCK8/RSPCKA/IRQ7-DS/AN216/ADTRG0#/COMP4
45	P65	I/O	IRQ9/AN211/CMPC53/DA1
46	P64	I/O	IRQ8/AN210/CMPC33/DA0
47	AVCC2	Power	-
48	AVSS2	Power	-
49	P54	I/O	IRQ2/AN202/CMPC22
50	P53	I/O	IRQ1/AN201/CMPC12
51	P52	I/O	IRQ0/AN200/CMPC02
52	P46	I/O	AN102/CMPC50/CMPC51
53	P45	I/O	AN101/CMPC40/CMPC41
54	P44	I/O	AN100/CMPC30/CMPC31
55	PH4	I/O	AN107/PGAVSS1
56	P42	I/O	AN002/CMPC20/CMPC21
57	P41	I/O	AN001/CMPC10/CMPC11
58	P40	I/O	AN000/CMPC00/CMPC01
59	PH0	I/O	AN007/PGAVSS0
60	AVCC1	Power	-
61	AVCC0	Power	-
62	AVSS0	Power	-
63	AVSS1	Power	-
64	P11	I/O	MTIOC3A/MTCLKC/MTIOC3A#/MTCLKC#/MTIOC9D/GTIOC3B/GTETRGA/GTIOC3B#/GTETRGD/TMO3/POE9#/IRQ1-DS

A.2.11 48-LFQFP

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
1	UB	Input	P00/MTIOC9A/MTIOC9A#/CACREF/RXD9/SMISO9/SSCL9/RXD12/SMISO12/SSCL12/RDX12/IRQ2/ADST1/COMP0
2	VCL	Power	-
3	MD	Input	FINED
4	\RES	Input	-
5	XTAL	Output	P37
6	VSS	Power	-
7	EXTAL	Input	P36
8	VCC	Power	-
9	PE2	I/O	POE10#/NMI
10	PD7	I/O	MTIOC9A/MTIOC9A#/GTIOC0A/GTIOC3A/GTIOC0A#/GTIOC3A#/TMRI1/TMRI5/TXD5/SMOSI5/SSDA5/SSLA1/CTX0/IRQ8
11	PD5	I/O	GTIOC1A/GTETRGA/GTIOC1A#/TMRI0/TMRI6/RXD1/SMISO1/SSCL1/RXD11/SMISO11/SSCL11/IRQ6
12	PD3	I/O	GTIOC2A/GTETRGD/GTIOC2A#/TMO0/TXD1/SMOSI1/SSDA1/TXD11/SMOSI11/SSDA11

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
13	PB6	I/O	GTIOC2A/GTIOC2A#/RXD5/SMISO5/SSCL5/RXD11/SMISO11/SSCL11/RXD12/SMISO12/SSCL12/RDX12/CRX0/IRQ2
14	PB5	I/O	GTIOC2B/GTIOC2B#/TXD5/SMOSI5/SSDA5/TXD11/SMOSI11/SSDA11/TXD12/SMOSI12/SSDA12/TXD12/SIOX12/CTX0
15	PB4	I/O	GTETRGA/GTETRGA#/GTETRG/POE8#/CTS5#/RTS5#/SS5#/SCK11/CTS11#/RTS11#/SS11#/IRQ3-DS
16	PB3	I/O	MTIOC0A/MTIOC0A#/CACREF/SCK6/RSPCKA/IRQ9
17	PB2	I/O	MTIOC0B/MTIOC0B#/GTADSM0/TMRI0/TXD6/SMOSI6/SSDA6/SDA0/ADSM0
18	PB1	I/O	MTIOC0C/MTIOC0C#/GTADSM1/TMCI0/RXD6/SMISO6/SSCL6/SCL0/IRQ4/ADSM1
19	PB0	I/O	MTIOC0D/MTIOC0D#/TMO0/TXD6/SMOSI6/SSDA6/CTS11#/RTS11#/SS11#/MOSIA/IRQ8/ADTRG2#
20	PA5	I/O	MTIOC1A/MTIOC1A#/TMCI3/RXD6/SMISO6/SSCL6/MISOA/IRQ1/ADTRG1#
21	PA3	I/O	MTIOC2A/MTIOC2A#/GTADSM0/TMRI7/TXD9/SMOSI9/SSDA9/SSLA0
22	VCC	Power	-
23	VSS	Power	-
24	P94	I/O	MTIOC7A/MTIOC7A#/GTIOC5A/GTIOC8A/GTIOC5A#/GTIOC8A#
25	P76	I/O	MTIOC4D/MTIOC4D#/GTIOC2B/GTIOC6B/GTIOC2B#/GTIOC6B#
26	P75	I/O	MTIOC4C/MTIOC4C#/GTIOC1B/GTIOC5B/GTIOC1B#/GTIOC5B#
27	P74	I/O	MTIOC3D/MTIOC3D#/GTIOC0B/GTIOC4B/GTIOC0B#/GTIOC4B#
28	P73	I/O	MTIOC4B/MTIOC4B#/GTIOC2A/GTIOC6A/GTIOC2A#/GTIOC6A#
29	P72	I/O	MTIOC4A/MTIOC4A#/GTIOC1A/GTIOC5A/GTIOC1A#/GTIOC5A#
30	P71	I/O	MTIOC3B/MTIOC3B#/GTIOC0A/GTIOC4A/GTIOC0A#/GTIOC4A#
31	VCC	Power	-
32	VSS	Power	-
33	P65	I/O	IRQ9/AN211/CMPC53/DA1
34	P64	I/O	IRQ8/AN210/CMPC33/DA0
35	AVCC2	Power	-
36	AVSS2	Power	-
37	P62	I/O	IRQ6/AN208/CMPC43
38	P44	I/O	AN100/CMPC30/CMPC31
39	P43	I/O	AN003
40	P42	I/O	AN002/CMPC20/CMPC21
41	P41	I/O	AN001/CMPC10/CMPC11
42	P40	I/O	AN000/CMPC00/CMPC01
43	AVCC1	Power	-
44	AVCC0	Power	-
45	AVSS0	Power	-
46	AVSS1	Power	-
47	P11	I/O	MTIOC3A/MTCLKC/MTIOC3A#/MTCLKC#/MTIOC9D/GTIOC3B/GTETRGA/GTIOC3B#/GTETRG/TMO3/POE9#/IRQ1-DS
48	P10	I/O	MTIOC9B/MTCLKD/MTIOC9B#/MTCLKD#/GTETRGA/GTETRGA#/GTETRGA/TMRI3/POE12#/CTS6#/RTS6#/SS6#/IRQ0-DS

A.3 Symbol Parameters

Orderable Part Number	Min Input Voltage	Max Input Voltage	Max Output Frequency	Min Operating Temperature	Max Operating Temperature	RAM Size	Memory Size	Interface	Number of ADC Channels	Number of I2C Channels	Number of SPI Channels	Number of UART Channels	Number of Timers/Counters
R5F566TAAGF F#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	256 KB	SPI, I2C, CAN, SCI	12-bit X 19-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TAAGF H#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	256 KB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TAAGF M#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	256 KB	SPI, I2C, CAN, SCI	12-bit X 15-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TAAGF M#30	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	256 KB	SPI, I2C, CAN, SCI	12-bit X 15-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TAAGF N#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	256 KB	SPI, I2C, CAN, SCI	12-bit X 19-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TAAGF N#30	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	256 KB	SPI, I2C, CAN, SCI	12-bit X 19-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TAAGF P#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	256 KB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TABGF P#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	256 KB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TABGF P#30	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	256 KB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TAEGF F#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	256 KB	SPI, I2C, CAN, SCI	12-bit X 19-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TAEGF H#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	256 KB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch

Orderable Part Number	Min Input Voltage	Max Input Voltage	Max Output Frequency	Min Operating Temperature	Max Operating Temperature	RAM Size	Memory Size	Interface	Number of ADC Channels	Number of I2C Channels	Number of SPI Channels	Number of UART Channels	Number of Timers/Counters
R5F566TAEGFM#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	256 KB	SPI, I2C, CAN, SCI	12-bit X 15-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TAEGFN#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	256 KB	SPI, I2C, CAN, SCI	12-bit X 19-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TAEGFP#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	256 KB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TAFGFP#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	256 KB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TEAGFF#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 19-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TEAGFH#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TEAGFM#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 15-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TEAGFM#30	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 15-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TEAGFN#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 19-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TEAGFP#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TEAGFP#30	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TEBGFP#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch

Orderable Part Number	Min Input Voltage	Max Input Voltage	Max Output Frequency	Min Operating Temperature	Max Operating Temperature	RAM Size	Memory Size	Interface	Number of ADC Channels	Number of I2C Channels	Number of SPI Channels	Number of UART Channels	Number of Timers/Counters
R5F566TEBGF P#30	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TEEGF F#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 19-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TEEGF H#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TEEGF M#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 15-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TEEGF N#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 19-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TEEGF P#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TEFGF P#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TEFGF P#30	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	64 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TFAGF P#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	128 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TFAGF P#30	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	128 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TFBGF P#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	128 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TFCGF B#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	128 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 30-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch

Orderable Part Number	Min Input Voltage	Max Input Voltage	Max Output Frequency	Min Operating Temperature	Max Operating Temperature	RAM Size	Memory Size	Interface	Number of ADC Channels	Number of I2C Channels	Number of SPI Channels	Number of UART Channels	Number of Timers/Counters
R5F566TFCGF B#30	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	128 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 30-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TFCGF P#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	128 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TFEGF P#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	128 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TFFGF P#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	128 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TFGGF B#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	128 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 30-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TFGGF P#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	128 KB	512 KB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TKAGF P#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	128 KB	1 MB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TKAGF P#30	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	128 KB	1 MB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TKBGF P#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	128 KB	1 MB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TKCDF P#30	2.7 V	5.5 V	160 Mhz	-40 °C	+85 °C	128 KB	1 MB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TKCGF B#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	128 KB	1 MB	SPI, I2C, CAN, SCI	12-bit X 30-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TKCGF P#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	128 KB	1 MB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch

Orderable Part Number	Min Input Voltage	Max Input Voltage	Max Output Frequency	Min Operating Temperature	Max Operating Temperature	RAM Size	Memory Size	Interface	Number of ADC Channels	Number of I2C Channels	Number of SPI Channels	Number of UART Channels	Number of Timers/Counters
R5F566TKEGF P#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	128 KB	1 MB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TKFGF P#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	128 KB	1 MB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TKGGF B#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	128 KB	1 MB	SPI, I2C, CAN, SCI	12-bit X 30-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch
R5F566TKGGF P#10	2.7 V	5.5 V	160 Mhz	-40 °C	+105 °C	128 KB	1 MB	SPI, I2C, CAN, SCI	12-bit X 22-Ch	8	8	7	8-bit X 8-Ch, 16-bit X 13-Ch, 32-bit X 10-Ch

A.4 Footprint Design Information

A.4.1 64-LFQFP

IPC Footprint Type	Package Code/ POD number	Number of Pins
QFP	PLQP0064KB-C	64

Description	Dimension	Value (mm)	Diagram
Minimum lead span (vertical side)	Dmin	12	<p>The diagram shows a square footprint with pins on all four sides. Key dimensions labeled include E1 (top lead span), E2 (bottom lead span), D1 (right lead span), D2 (left lead span), B (pin width), and Pitch (distance between pins).</p>
Maximum lead span (vertical side)	Dmax	12	
Minimum lead span (horizontal side)	Emin	12	
Maximum lead span (horizontal side)	Emax	12	
Minimum body span (vertical side)	D1min	9.9	
Maximum body span (vertical side)	D1max	10.1	
Minimum body span (horizontal side)	E1min	9.9	
Maximum body span (horizontal side)	E1max	10.1	
Minimum Lead Width	Bmin	0.15	
Maximum Lead Width	Bmax	0.27	
Minimum Lead Length	Lmin	0.45	
Maximum Lead Length	Lmax	0.75	
Maximum Height	Amax	1.7	<p>The diagram shows a side view of the package. Key dimensions labeled include Amax (maximum height), A1min (minimum standoff height), L (lead length), and B (pin width).</p>
Minimum Standoff Height	A1min	0	
Minimum Lead Thickness	cmin	-	
Maximum Lead Thickness	cmax	-	
Number of pins (vertical side)	PinCountD	16	
Number of pins (horizontal side)	PinCountE	16	
Distance between the center of any two adjacent pins	Pitch	0.5	
Location of pin 1; S2 = corner of D side, C1 = center of E side	Pin1	S2	
Minimum thermal pad size (vertical side)	D2min	-	
Maximum thermal pad size (vertical side)	D2max	-	
Minimum thermal pad size (horizontal side)	E2min	-	
Maximum thermal pad size (horizontal side)	E2max	-	

Recommended Land Pattern (NSMD Design)			
Description	Dimension	Value (mm)	Diagram
Distance between left pad toe to right pad toe (horizontal side)	ZE	-	<p>The diagram shows the recommended land pattern for the NSMD design. Key dimensions labeled include ZE (distance between left pad toe to right pad toe), ZD (distance between top pad toe to bottom pad toe), GE (distance between left pad heel to right pad heel), GD (distance between top pad heel to bottom pad heel), X (pad width), and Y (pad length).</p>
Distance between top pad toe to bottom pad toe (vertical side)	ZD	-	
Distance between left pad heel to right pad heel (horizontal side)	GE	-	
Distance between top pad heel to bottom pad heel (vertical side)	GD	-	
Pad Width	X	-	
Pad Length	Y	-	

A.4.2 80-LQFP

IPC Footprint Type	Package Code/ POD number	Number of Pins
QFP	PLQP0080JA-B	80

Description	Dimension	Value (mm)	Diagram
Minimum lead span (vertical side)	Dmin	16.2	
Maximum lead span (vertical side)	Dmax	16.2	
Minimum lead span (horizontal side)	Emin	16.2	
Maximum lead span (horizontal side)	Emax	16.2	
Minimum body span (vertical side)	D1min	14.1	
Maximum body span (vertical side)	D1max	14.1	
Minimum body span (horizontal side)	E1min	14.1	
Maximum body span (horizontal side)	E1max	14.1	
Minimum Lead Width	Bmin	0.22	
Maximum Lead Width	Bmax	0.38	
Minimum Lead Length	Lmin	0.45	
Maximum Lead Length	Lmax	0.75	
Maximum Height	Amax	1.7	
Minimum Standoff Height	A1min	0	
Minimum Lead Thickness	cmin	-	
Maximum Lead Thickness	cmax	-	
Number of pins (vertical side)	PinCountD	20	
Number of pins (horizontal side)	PinCountE	20	
Distance between the center of any two adjacent pins	Pitch	0.65	
Location of pin 1; S2 = corner of D side, C1 = center of E side	Pin1	S2	
Minimum thermal pad size (vertical side)	D2min	-	
Maximum thermal pad size (vertical side)	D2max	-	
Minimum thermal pad size (horizontal side)	E2min	-	
Maximum thermal pad size (horizontal side)	E2max	-	

Recommended Land Pattern (NSMD Design)			
Description	Dimension	Value (mm)	Diagram
Distance between left pad toe to right pad toe (horizontal side)	ZE	-	
Distance between top pad toe to bottom pad toe (vertical side)	ZD	-	
Distance between left pad heel to right pad heel (horizontal side)	GE	-	
Distance between top pad heel to bottom pad heel (vertical side)	GD	-	
Pad Width	X	-	
Pad Length	Y	-	

A.4.3 80-LFQFP

IPC Footprint Type	Package Code/ POD number	Number of Pins
QFP	PLQP0080KB-B	80

Description	Dimension	Value (mm)	Diagram
Minimum lead span (vertical side)	Dmin	14.2	
Maximum lead span (vertical side)	Dmax	14.2	
Minimum lead span (horizontal side)	Emin	14.2	
Maximum lead span (horizontal side)	Emax	14.2	
Minimum body span (vertical side)	D1min	12.1	
Maximum body span (vertical side)	D1max	12.1	
Minimum body span (horizontal side)	E1min	12.1	
Maximum body span (horizontal side)	E1max	12.1	
Minimum Lead Width	Bmin	0.2	
Maximum Lead Width	Bmax	0.2	
Minimum Lead Length	Lmin	0.45	
Maximum Lead Length	Lmax	0.75	
Maximum Height	Amax	1.7	
Minimum Standoff Height	A1min	0	
Minimum Lead Thickness	cmin	-	
Maximum Lead Thickness	cmax	-	
Number of pins (vertical side)	PinCountD	20	
Number of pins (horizontal side)	PinCountE	20	
Distance between the center of any two adjacent pins	Pitch	0.5	
Location of pin 1; S2 = corner of D side, C1 = center of E side	Pin1	S2	
Minimum thermal pad size (vertical side)	D2min	-	
Maximum thermal pad size (vertical side)	D2max	-	
Minimum thermal pad size (horizontal side)	E2min	-	
Maximum thermal pad size (horizontal side)	E2max	-	

Recommended Land Pattern (NSMD Design)			
Description	Dimension	Value (mm)	Diagram
Distance between left pad toe to right pad toe (horizontal side)	ZE	-	
Distance between top pad toe to bottom pad toe (vertical side)	ZD	-	
Distance between left pad heel to right pad heel (horizontal side)	GE	-	
Distance between top pad heel to bottom pad heel (vertical side)	GD	-	
Pad Width	X	-	
Pad Length	Y	-	

A.4.4 112-LQFP

IPC Footprint Type	Package Code/ POD number	Number of Pins
QFP	PLQP0112JA-B	112

Description	Dimension	Value (mm)	Diagram
Minimum lead span (vertical side)	Dmin	21.8	
Maximum lead span (vertical side)	Dmax	22.2	
Minimum lead span (horizontal side)	Emin	21.8	
Maximum lead span (horizontal side)	Emax	22.2	
Minimum body span (vertical side)	D1min	20.1	
Maximum body span (vertical side)	D1max	20.1	
Minimum body span (horizontal side)	E1min	20.1	
Maximum body span (horizontal side)	E1max	20.1	
Minimum Lead Width	Bmin	0.27	
Maximum Lead Width	Bmax	0.37	
Minimum Lead Length	Lmin	0.45	
Maximum Lead Length	Lmax	0.75	
Maximum Height	Amax	1.7	
Minimum Standoff Height	A1min	0	
Minimum Lead Thickness	cmin	-	
Maximum Lead Thickness	cmax	-	
Number of pins (vertical side)	PinCountD	28	
Number of pins (horizontal side)	PinCountE	28	
Distance between the center of any two adjacent pins	Pitch	0.65	
Location of pin 1; S2 = corner of D side, C1 = center of E side	Pin1	S2	
Minimum thermal pad size (vertical side)	D2min	-	
Maximum thermal pad size (vertical side)	D2max	-	
Minimum thermal pad size (horizontal side)	E2min	-	
Maximum thermal pad size (horizontal side)	E2max	-	

Recommended Land Pattern (NSMD Design)			
Description	Dimension	Value (mm)	Diagram
Distance between left pad toe to right pad toe (horizontal side)	ZE	-	
Distance between top pad toe to bottom pad toe (vertical side)	ZD	-	
Distance between left pad heel to right pad heel (horizontal side)	GE	-	
Distance between top pad heel to bottom pad heel (vertical side)	GD	-	
Pad Width	X	-	
Pad Length	Y	-	

A.4.5 100-LFQFP

IPC Footprint Type	Package Code/ POD number	Number of Pins
QFP	PLQP0100KB-B	100

Description	Dimension	Value (mm)	Diagram
Minimum lead span (vertical side)	Dmin	15.8	
Maximum lead span (vertical side)	Dmax	16.2	
Minimum lead span (horizontal side)	Emin	15.8	
Maximum lead span (horizontal side)	Emax	16.2	
Minimum body span (vertical side)	D1min	13.9	
Maximum body span (vertical side)	D1max	14.1	
Minimum body span (horizontal side)	E1min	13.9	
Maximum body span (horizontal side)	E1max	14.1	
Minimum Lead Width	Bmin	0.15	
Maximum Lead Width	Bmax	0.27	
Minimum Lead Length	Lmin	0.45	
Maximum Lead Length	Lmax	0.75	
Maximum Height	Amax	1.7	
Minimum Standoff Height	A1min	0	
Minimum Lead Thickness	cmin	-	
Maximum Lead Thickness	cmax	-	
Number of pins (vertical side)	PinCountD	25	
Number of pins (horizontal side)	PinCountE	25	
Distance between the center of any two adjacent pins	Pitch	0.5	
Location of pin 1; S2 = corner of D side, C1 = center of E side	Pin1	S2	
Minimum thermal pad size (vertical side)	D2min	-	
Maximum thermal pad size (vertical side)	D2max	-	
Minimum thermal pad size (horizontal side)	E2min	-	
Maximum thermal pad size (horizontal side)	E2max	-	

Recommended Land Pattern (NSMD Design)

Description	Dimension	Value (mm)	Diagram
Distance between left pad toe to right pad toe (horizontal side)	ZE	-	
Distance between top pad toe to bottom pad toe (vertical side)	ZD	-	
Distance between left pad heel to right pad heel (horizontal side)	GE	-	
Distance between top pad heel to bottom pad heel (vertical side)	GD	-	
Pad Width	X	-	
Pad Length	Y	-	

A.4.6 144-LFQFP

IPC Footprint Type	Package Code/ POD number	Number of Pins
QFP	PLQP0144KA-B	144

Description	Dimension	Value (mm)	Diagram
Minimum lead span (vertical side)	Dmin	21.8	
Maximum lead span (vertical side)	Dmax	22.2	
Minimum lead span (horizontal side)	Emin	21.8	
Maximum lead span (horizontal side)	Emax	22.2	
Minimum body span (vertical side)	D1min	20.1	
Maximum body span (vertical side)	D1max	20.1	
Minimum body span (horizontal side)	E1min	20.1	
Maximum body span (horizontal side)	E1max	20.1	
Minimum Lead Width	Bmin	0.17	
Maximum Lead Width	Bmax	0.27	
Minimum Lead Length	Lmin	0.45	
Maximum Lead Length	Lmax	0.75	
Maximum Height	Amax	1.7	
Minimum Standoff Height	A1min	0	
Minimum Lead Thickness	cmin	-	
Maximum Lead Thickness	cmax	-	
Number of pins (vertical side)	PinCountD	36	
Number of pins (horizontal side)	PinCountE	36	
Distance between the center of any two adjacent pins	Pitch	0.5	
Location of pin 1; S2 = corner of D side, C1 = center of E side	Pin1	S2	
Minimum thermal pad size (vertical side)	D2min	-	
Maximum thermal pad size (vertical side)	D2max	-	
Minimum thermal pad size (horizontal side)	E2min	-	
Maximum thermal pad size (horizontal side)	E2max	-	

Recommended Land Pattern (NSMD Design)			
Description	Dimension	Value (mm)	Diagram
Distance between left pad toe to right pad toe (horizontal side)	ZE	-	
Distance between top pad toe to bottom pad toe (vertical side)	ZD	-	
Distance between left pad heel to right pad heel (horizontal side)	GE	-	
Distance between top pad heel to bottom pad heel (vertical side)	GD	-	
Pad Width	X	-	
Pad Length	Y	-	