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
R5F562GAADFH#H1	112	LQFP	PLQP0112JA-A
R5F562T6AGFM#H3	64	LFQFP	PLQP0064KB-A
R5F562T6DDFF#H1	80	LQFP	PLQP0080JA-A
R5F562T6DDFF#H3	80	LQFP	PLQP0080JA-A
R5F562T6GDFF#V3	80	LQFP	PLQP0080JA-A
R5F562T6HDFF#V3	80	LQFP	PLQP0080JA-A
R5F562T7ADFF#H1	80	LQFP	PLQP0080JA-A
R5F562T7ADFH#H1	112	LQFP	PLQP0112JA-A
R5F562T7DDFF#H1	80	LQFP	PLQP0080JA-A
R5F562T7DDFF#H3	80	LQFP	PLQP0080JA-A
R5F562T7EDFH#V3	112	LQFP	PLQP0112JA-A
R5F562T7GDFF#H3	80	LQFP	PLQP0080JA-A
R5F562T7HDFF#V3	80	LQFP	PLQP0080JA-A
R5F562TAADFF#H1	80	LQFP	PLQP0080JA-A
R5F562TAADFF#H3	80	LQFP	PLQP0080JA-A
R5F562TAADFH#H1	112	LQFP	PLQP0112JA-A
R5F562TADDFF#H3	80	LQFP	PLQP0080JA-A
R5F562TADDFH#H1	112	LQFP	PLQP0112JA-A
R5F562TADDFH#H3	112	LQFP	PLQP0112JA-A
R5F562TAEDFH#H1	112	LQFP	PLQP0112JA-A
R5F562TAGDFF#H3	80	LQFP	PLQP0080JA-A
R5F562TAHDFF#V3	80	LQFP	PLQP0080JA-A

A.2   Symbol Pin Information

A.2.1 112-LQFP

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
1	PE5	I/O	IRQ0-B
2	EMLE	Input	-
3	VSS	Power	-
4	MDE	Input	-
5	VCL	Power	-
6	MD1	Input	-
7	MD0	Input	-
8	PE4	I/O	MTCLKC-C/IRQ1-B/POE10#-B
9	PE3	I/O	MTCLKD-C/IRQ2-A/POE11#
10	\RES	Input	-
11	XTAL	Output	-
12	VSS	Power	-
13	EXTAL	Input	-
14	VCC	Power	-
15	PE2	Input	NMI/POE10#-A
16	PE1	I/O	SSL3-C
17	PE0	I/O	CRX-C/ SSL2-C
18	PD7	I/O	GTIOC0A-B/CTX-C/ SSL1-C
19	PD6	I/O	GTIOC0B-B/SSL0-C
20	PD5	I/O	GTIOC1A-B/RXD1
21	PD4	I/O	GTIOC1B-B/SCK1
22	PD3	I/O	GTIOC2A-B/TXD1
23	PD2	I/O	GTIOC2B-B/MOSI-C

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
24	PD1	I/O	GTIOC3A/MISO-C
25	PD0	I/O	GTIOC3B/RSPCK-C
26	TDI	Input	-
27	TCK	Input	-
28	TDO	Output	-
29	PB7	I/O	SCK2-A
30	PB6	I/O	CRX-A/ RXD2-A
31	PB5	I/O	CTX-A/ TXD2-A
32	PLLVCC	Power	-
33	PB4	I/O	GTETRG/IRQ3/POE8#
34	PLLVSS	Power	-
35	PB3	I/O	MTIOC0A-A/SCK0
36	PB2	I/O	MTIOC0B-A/TXD0/SDA
37	PB1	I/O	MTIOC0C/RXD0/SCL
38	PB0	I/O	MTIOC0D/MOSI-B
39	PA5	I/O	ADTRG1#-A/MTIOC1A/MISO-B
40	PA4	I/O	ADTRG0#-A/MTIOC1B/RSPCK-B
41	PA3	I/O	MTIOC2A/SSL0-B
42	PA2	I/O	MTIOC2B/SSL1-B
43	PA1	I/O	MTIOC6A/SSL2-B
44	PA0	I/O	MTIOC6C/SSL3-B
45	VCC	Power	-
46	P96	I/O	IRQ4/POE4#
47	VSS	Power	-
48	P95	I/O	MTIOC6B
49	P94	I/O	MTIOC7A
50	P93	I/O	MTIOC7B
51	P92	I/O	MTIOC6D
52	P91	I/O	MTIOC7C
53	P90	I/O	MTIOC7D
54	TRCLK	Output	PG5
55	TRDATA3	Output	PG4
56	TRDATA2	Output	PG3
57	TRDATA1	Output	PG2/IRQ2-B
58	TRDATA0	Output	PG1/IRQ1-C
59	TRSYNC	Output	PG0/IRQ0-C
60	P76	I/O	MTIOC4D/GTIOC2B-A
61	P75	I/O	MTIOC4C/GTIOC1B-A
62	P74	I/O	MTIOC3D/GTIOC0B-A
63	P73	I/O	MTIOC4B/GTIOC2A-A
64	P72	I/O	MTIOC4A/GTIOC1A-A
65	P71	I/O	MTIOC3B/GTIOC0A-A
66	P70	I/O	IRQ5/POE0#
67	P33	I/O	MTIOC3A/MTCLKA-A/SSL3-A
68	P32	I/O	MTIOC3C/MTCLKB-A/SSL2-A
69	VCC	Power	-
70	P31	I/O	MTIOC0A-B/MTCLKC-A/SSL1-A
71	VSS	Power	-
72	P30	I/O	MTIOC0B-B/MTCLKD-A/SSL0-A
73	P24	I/O	RSPCK-A
74	P23	I/O	CTX-B/ LTX/MOSI-A
75	P22	I/O	ADTRG#/CRX-B/ LRX/MISO-A
76	P21	I/O	ADTRG1#-B/MTCLKA-B/IRQ6
77	P20	I/O	ADTRG0#-B/MTCLKB-B/IRQ7
78	P65	Input	AN5
79	P64	Input	AN4
80	AVCC	Power	-
81	VREF	Power	-
82	AVSS	Power	-
83	P63	Input	AN3
84	P62	Input	AN2
85	P61	Input	AN1

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
86	P60	Input	AN0
87	P55	Input	AN11
88	P54	Input	AN10
89	P53	Input	AN9
90	P52	Input	AN8
91	P51	Input	AN7
92	P50	Input	AN6
93	P47	Input	AN103/CVREFH
94	P46	Input	AN102
95	P45	Input	AN101
96	P44	Input	AN100
97	P43	Input	AN003/CVREFL
98	P42	Input	AN002
99	P41	Input	AN001
100	P40	Input	AN000
101	AVCC0	Power	-
102	VREFH0	Power	-
103	VREFL0	Power	-
104	AVSS0	Power	-
105	P82	I/O	MTIC5U/SCK2-B
106	P81	I/O	MTIC5V/TXD2-B
107	P80	I/O	MTIC5W/RXD2-B
108	\WDTOVF	Output	-
109	P11	I/O	MTCLKC-B/IRQ1-A
110	P10	I/O	MTCLKD-B/IRQ0-A
111	\TRST	Input	-
112	TMS	Input	-

A.2.2 80-LQFP

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
1	EMLE	Input	-
2	VSS	Power	-
3	MDE	Input	-
4	VCL	Power	-
5	MD1	Input	-
6	MD0	Input	-
7	PE4	I/O	MTCLKC-C/IRQ1-B/POE10#-B
8	PE3	I/O	MTCLKD-C/IRQ2-A/POE11#
9	\RES	Input	-
10	XTAL	Output	-
11	VSS	Power	-
12	EXTAL	Input	-
13	VCC	Power	-
14	PE2	Input	NMI/POE10#-A
15	PE0	I/O	CRX-C
16	\TRST	Input	PD7/GTIOC0A-B/CTX-C
17	TMS	Input	PD6/GTIOC0B-B
18	TDI	Input	PD5/GTIOC1A-B/RXD1
19	TCK	Input	PD4/GTIOC1B-B/SCK1
20	TDO	Output	PD3/GTIOC2A-B/TXD1
21	PB7	I/O	SCK2-A
22	PB6	I/O	CRX-A/RXD2-A
23	PB5	I/O	CTX-A/TXD2-A
24	PLLVCC	Power	-
25	PB4	I/O	GTETRG/IRQ3/POE8#
26	PLLVSS	Power	-
27	PB3	I/O	MTIOC0A-A/SCK0
28	PB2	I/O	MTIOC0B-A/TXD0/SDA
29	PB1	I/O	MTIOC0C/RXD0/SCL
30	PB0	I/O	MTIOC0D/MOSI-B
31	PA3	I/O	MTIOC2A/SSL0-B

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
32	PA2	I/O	MTIOC2B/SSL1-B
33	VCC	Power	-
34	P96	I/O	IRQ4/POE4#
35	VSS	Power	-
36	P95	I/O	MTIOC6B
37	P94	I/O	MTIOC7A
38	P93	I/O	MTIOC7B
39	P92	I/O	MTIOC6D
40	P91	I/O	MTIOC7C
41	P76	I/O	MTIOC4D/GTIOC2B-A
42	P75	I/O	MTIOC4C/GTIOC1B-A
43	P74	I/O	MTIOC3D/GTIOC0B-A
44	P73	I/O	MTIOC4B/GTIOC2A-A
45	P72	I/O	MTIOC4A/GTIOC1A-A
46	P71	I/O	MTIOC3B/GTIOC0A-A
47	P70	I/O	IRQ5/POE0#
48	P33	I/O	MTIOC3A/MTCLKA-A/SSL3-A
49	P32	I/O	MTIOC3C/MTCLKB-A/SSL2-A
50	VCC	Power	-
51	P31	I/O	MTIOC0A-B/MTCLKC-A/SSL1-A
52	VSS	Power	-
53	P30	I/O	MTIOC0B-B/MTCLKD-A/SSL0-A
54	P24	I/O	RSPCK-A
55	P23	I/O	CTX-B/LTX/MOSI-A
56	P22	I/O	ADTRG#/CRX-B/LRX/MISO-A
57	P21	I/O	ADTRG1#-B/MTCLKA-B/IRQ6
58	P20	I/O	ADTRG0#-B/MTCLKB-B/IRQ7
59	AVCC	Power	-
60	AVSS	Power	-
61	P63	Input	AN3
62	P62	Input	AN2
63	P61	Input	AN1
64	P60	Input	AN0
65	P47	Input	AN103/CVREFH
66	P46	Input	AN102
67	P45	Input	AN101
68	P44	Input	AN100
69	P43	Input	AN003/CVREFL
70	P42	Input	AN002
71	P41	Input	AN001
72	P40	Input	AN000
73	AVCC0	Power	-
74	VREFH0	Power	-
75	VREFL0	Power	-
76	AVSS0	Power	-
77	P11	I/O	MTCLKC-B/IRQ1-A
78	P10	I/O	MTCLKD-B/IRQ0-A
79	PA5	I/O	ADTRG1#-A/MTIOC1A/MISO-B
80	PA4	I/O	ADTRG0#-A/MTIOC1B/RSPCK-B

A.2.3 80-LQFP

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
1	EMLE	Input	-
2	VSS	Power	-
3	MDE	Input	-
4	VCL	Power	-
5	MD1	Input	-
6	MD0	Input	-
7	PE4	I/O	MTCLKC-C/IRQ1-B/POE10#-B
8	PE3	I/O	MTCLKD-C/IRQ2-A/POE11#
9	\RES	Input	-

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
10	XTAL	Output	-
11	VSS	Power	-
12	EXTAL	Input	-
13	VCC	Power	-
14	PE2	Input	NMI/POE10#-A
15	\TRST	Input	PD7/GTIOC0A-B
16	TMS	Input	PD6/GTIOC0B-B
17	TDI	Input	PD5/GTIOC1A-B/RXD1
18	TCK	Input	PD4/GTIOC1B-B/SCK1
19	TDO	Output	PD3/GTIOC2A-B/TXD1
20	PD2	I/O	GTIOC2B-B
21	PB7	I/O	SCK2-A
22	PB6	I/O	CRX-A/ RXD2-A
23	PB5	I/O	CTX-A/ TXD2-A
24	PLLVCC	Power	-
25	PB4	I/O	GTETRG/IRQ3/POE8#
26	PLLVSS	Power	-
27	PB3	I/O	MTIOC0A-A/SCK0
28	PB2	I/O	MTIOC0B-A/TXD0/SDA
29	PB1	I/O	MTIOC0C/RXD0/SCL
30	PB0	I/O	MTIOC0D
31	PA5	I/O	ADTRG1#-A/MTIOC1A
32	PA3	I/O	MTIOC2A
33	VCC	Power	-
34	P96	I/O	IRQ4/POE4#
35	VSS	Power	-
36	P95	I/O	MTIOC6B
37	P94	I/O	MTIOC7A
38	P93	I/O	MTIOC7B
39	P92	I/O	MTIOC6D
40	P91	I/O	MTIOC7C
41	P90	I/O	MTIOC7D
42	P76	I/O	MTIOC4D/GTIOC2B-A
43	P75	I/O	MTIOC4C/GTIOC1B-A
44	P74	I/O	MTIOC3D/GTIOC0B-A
45	P73	I/O	MTIOC4B/GTIOC2A-A
46	P72	I/O	MTIOC4A/GTIOC1A-A
47	P71	I/O	MTIOC3B/GTIOC0A-A
48	P70	I/O	IRQ5/POE0#
49	P33	I/O	MTIOC3A/MTCLKA-A/SSL3-A
50	P32	I/O	MTIOC3C/MTCLKB-A/SSL2-A
51	VCC	Power	-
52	P31	I/O	MTIOC0A-B/MTCLKC-A/SSL1-A
53	VSS	Power	-
54	P30	I/O	MTIOC0B-B/MTCLKD-A/SSL0-A
55	P24	I/O	RSPCK-A
56	P23	I/O	CTX-B/ LTX/MOSI-A
57	P22	I/O	ADTRG#/CRX-B/ LRX/MISO-A
58	P20	I/O	ADTRG0#-B/MTCLKB-B/IRQ7
59	AVCC	Power	-
60	AVSS	Power	-
61	P63	Input	AN3
62	P62	Input	AN2
63	P61	Input	AN1
64	P60	Input	AN0
65	P47	Input	AN103/CVREFH
66	P46	Input	AN102
67	P45	Input	AN101
68	P44	Input	AN100
69	P43	Input	AN003/CVREFL
70	P42	Input	AN002
71	P41	Input	AN001

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
72	P40	Input	AN000
73	AVCC0	Power	-
74	VREFH0	Power	-
75	VREFL0	Power	-
76	AVSS0	Power	-
77	P82	I/O	MTIC5U/SCK2-B
78	P81	I/O	MTIC5V/TXD2-B
79	P80	I/O	MTIC5W/RXD2-B
80	P10	I/O	MTCLKD-B/IRQ0-A

A.2.4 64-LFQFP

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
1	EMLE	Input	-
2	MDE	Input	-
3	VCL	Power	-
4	MD1	Input	-
5	MD0	Input	-
6	\RES	Input	-
7	XTAL	Output	-
8	VSS	Power	-
9	EXTAL	Input	-
10	VCC	Power	-
11	PE2	Input	NMI/POE10#-A
12	\TRST	Input	PD7/GTIOC0A-B
13	TMS	Input	PD6/GTIOC0B-B
14	TDI	Input	PD5/GTIOC1A-B/RXD1
15	TCK	Input	PD4/GTIOC1B-B/SCK1
16	TDO	Output	PD3/GTIOC2A-B/TXD1
17	PB7	I/O	SCK2-A
18	PB6	I/O	CRX-A/ RXD2-A
19	PB5	I/O	CTX-A/ TXD2-A
20	PLLVCC	Power	-
21	PB4	I/O	GTETRG/IRQ3/POE8#
22	PLLVSS	Power	-
23	PB3	I/O	MTIOC0A-A/SCK0
24	PB2	I/O	MTIOC0B-A/TXD0/SDA
25	PB1	I/O	MTIOC0C/RXD0/SCL
26	PB0	I/O	MTIOC0D/MOSI-B
27	PA3	I/O	MTIOC2A/SSL0-B
28	PA2	I/O	MTIOC2B/SSL1-B
29	P94	I/O	MTIOC7A
30	P93	I/O	MTIOC7B
31	P92	I/O	MTIOC6D
32	P91	I/O	MTIOC7C
33	P76	I/O	MTIOC4D/GTIOC2B-A
34	P75	I/O	MTIOC4C/GTIOC1B-A
35	P74	I/O	MTIOC3D/GTIOC0B-A
36	P73	I/O	MTIOC4B/GTIOC2A-A
37	P72	I/O	MTIOC4A/GTIOC1A-A
38	P71	I/O	MTIOC3B/GTIOC0A-A
39	P70	I/O	IRQ5/POE0#
40	P33	I/O	MTIOC3A/MTCLKA-A/SSL3-A
41	P32	I/O	MTIOC3C/MTCLKB-A/SSL2-A
42	VCC	Power	-
43	P31	I/O	MTIOC0A-B/MTCLKC-A/SSL1-A
44	VSS	Power	-
45	P30	I/O	MTIOC0B-B/MTCLKD-A/SSL0-A
46	P24	I/O	RSPCK-A
47	P23	I/O	CTX-B/LTX/MOSI-A
48	P22	I/O	CRX-B/LRX/MISO-A
49	P47	Input	AN103/CVREFH

Pin Number	Primary Pin Name	Primary Electrical Type	Alternate Pin Name(s)
50	P46	Input	AN102
51	P45	Input	AN101
52	P44	Input	AN100
53	P43	Input	AN003/CVREFL
54	P42	Input	AN002
55	P41	Input	AN001
56	P40	Input	AN000
57	AVCC0	Power	-
58	VREFH0	Power	-
59	VREFL0	Power	-
60	AVSS0	Power	-
61	P11	I/O	MTCLKC-B/IRQ1-A
62	P10	I/O	MTCLKD-B/IRQ0-A
63	PA5	I/O	ADTRG1#-A/MTIOC1A/MISO-B
64	PA4	I/O	ADTRG0#-A/MTIOC1B/RSPCK-B

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
R5F562GAAD FH#H1	4 V	5.5 V	100 MHz	−40° C	+85 °C	16 KB	256 KB	SCI, I2C, SPI, CAN, LIN	10-bit X 12-Ch, 12-bit X 8-Ch	1	1	3	8-bit X 1-Ch, 14-bit X 1-Ch, 16-bit X 16-Ch
R5F562T6AGF M#H3	4 V	5.5 V	100 MHz	−40° C	+105 °C	8 KB	64 KB	SCI, I2C, SPI, CAN, LIN	10-bit X 12-Ch, 12-bit X 8-Ch	1	1	3	8-bit X 1-Ch, 14-bit X 1-Ch, 16-bit X 16-Ch
R5F562T6DD FF#H1	4 V	5.5 V	100 MHz	−40° C	+85 °C	8 KB	64 KB	SCI, I2C, SPI, CAN, LIN	10-bit X 12-Ch, 12-bit X 8-Ch	1	1	3	8-bit X 1-Ch, 14-bit X 1-Ch, 16-bit X 16-Ch
R5F562T6DD FF#H3	4 V	5.5 V	100 MHz	−40° C	+85 °C	8 KB	64 KB	SCI, I2C, SPI, CAN, LIN	10-bit X 12-Ch, 12-bit X 8-Ch	1	1	3	8-bit X 1-Ch, 14-bit X 1-Ch, 16-bit X 16-Ch
R5F562T6GD FF#V3	-	-	100 MHz	−40° C	+85 °C	8 KB	64 KB	SCI, I2C, SPI, CAN, LIN	10-bit X 12-Ch, 12-bit X 8-Ch	1	1	3	8-bit X 1-Ch, 14-bit X 1-Ch, 16-bit X 16-Ch
R5F562T6HD FF#V3	-	-	100 MHz	−40° C	+85 °C	8 KB	64 KB	SCI, I2C, SPI, CAN, LIN	10-bit X 12-Ch, 12-bit X 8-Ch	1	1	3	8-bit X 1-Ch, 14-bit X 1-Ch, 16-bit X 16-Ch
R5F562T7ADF F#H1	4 V	5.5 V	100 MHz	−40° C	+85 °C	8 KB	128 KB	SCI, I2C, SPI, CAN, LIN	10-bit X 12-Ch, 12-bit X 8-Ch	1	1	3	8-bit X 1-Ch, 14-bit X 1-Ch, 16-bit X 16-Ch
R5F562T7ADF H#H1	4 V	5.5 V	100 MHz	−40° C	+85 °C	8 KB	128 KB	SCI, I2C, SPI, CAN, LIN	10-bit X 12-Ch, 12-bit X 8-Ch	1	1	3	8-bit X 1-Ch, 14-bit X 1-Ch, 16-bit X 16-Ch
R5F562T7DD FF#H1	4 V	5.5 V	100 MHz	−40° C	+85 °C	8 KB	128 KB	SCI, I2C, SPI, CAN, LIN	10-bit X 12-Ch, 12-bit X 8-Ch	1	1	3	8-bit X 1-Ch, 14-bit X 1-Ch, 16-bit X 16-Ch
R5F562T7DD FF#H3	4 V	5.5 V	100 MHz	−40° C	+85 °C	8 KB	128 KB	SCI, I2C, SPI, CAN, LIN	10-bit X 12-Ch, 12-bit X 8-Ch	1	1	3	8-bit X 1-Ch, 14-bit X 1-Ch, 16-bit X 16-Ch
R5F562T7EDF H#V3	2.7 V	3.6 V	100 MHz	−40° C	+85 °C	8 KB	128 KB	SCI, I2C, SPI, CAN, LIN	10-bit X 12-Ch, 12-bit X 8-Ch	1	1	3	8-bit X 1-Ch, 14-bit X 1-Ch, 16-bit X 16-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
R5F562T7GD FF#H3	4 V	5.5 V	100 MHz	−40° C	+85 °C	8 KB	128 KB	SCI, I2C, SPI, CAN, LIN	10-bit X 12-Ch, 12-bit X 8-Ch	1	1	3	8-bit X 1-Ch, 14-bit X 1-Ch, 16-bit X 16-Ch
R5F562T7HD FF#V3	4 V	5.5 V	100 MHz	−40° C	+85 °C	8 KB	128 KB	SCI, I2C, SPI, CAN, LIN	10-bit X 12-Ch, 12-bit X 8-Ch	1	1	3	8-bit X 1-Ch, 14-bit X 1-Ch, 16-bit X 16-Ch
R5F562TAADF F#H1	4 V	5.5 V	100 MHz	−40° C	+85 °C	16 KB	256 KB	SCI, I2C, SPI, CAN, LIN	10-bit X 12-Ch, 12-bit X 8-Ch	1	1	3	8-bit X 1-Ch, 14-bit X 1-Ch, 16-bit X 16-Ch
R5F562TAADF F#H3	4 V	5.5 V	100 MHz	−40° C	+85 °C	16 KB	256 KB	SCI, I2C, SPI, CAN, LIN	10-bit X 12-Ch, 12-bit X 8-Ch	1	1	3	8-bit X 1-Ch, 14-bit X 1-Ch, 16-bit X 16-Ch
R5F562TAADF H#H1	4 V	5.5 V	100 MHz	−40° C	+85 °C	16 KB	256 KB	SCI, I2C, SPI, CAN, LIN	10-bit X 12-Ch, 12-bit X 8-Ch	1	1	3	8-bit X 1-Ch, 14-bit X 1-Ch, 16-bit X 16-Ch
R5F562TADD FF#H3	4 V	5.5 V	100 MHz	−40° C	+85 °C	16 KB	256 KB	SCI, I2C, SPI, CAN, LIN	10-bit X 12-Ch, 12-bit X 8-Ch	1	1	3	8-bit X 1-Ch, 14-bit X 1-Ch, 16-bit X 16-Ch
R5F562TADD FH#H1	4 V	5.5 V	100 MHz	−40° C	+85 °C	16 KB	256 KB	SCI, I2C, SPI, CAN, LIN	10-bit X 12-Ch, 12-bit X 8-Ch	1	1	3	8-bit X 1-Ch, 14-bit X 1-Ch, 16-bit X 16-Ch
R5F562TADD FH#H3	4 V	5.5 V	100 MHz	−40° C	+85 °C	16 KB	256 KB	SCI, I2C, SPI, CAN, LIN	10-bit X 12-Ch, 12-bit X 8-Ch	1	1	3	8-bit X 1-Ch, 14-bit X 1-Ch, 16-bit X 16-Ch
R5F562TAEDF H#H1	2.7 V	3.6 V	100 MHz	−40° C	+85 °C	16 KB	256 KB	SCI, I2C, SPI, CAN, LIN	10-bit X 12-Ch, 12-bit X 8-Ch	1	1	3	8-bit X 1-Ch, 14-bit X 1-Ch, 16-bit X 16-Ch
R5F562TAGD FF#H3	-	-	100 MHz	−40° C	+85 °C	16 KB	256 KB	SCI, I2C, SPI, CAN, LIN	10-bit X 12-Ch, 12-bit X 8-Ch	1	1	3	8-bit X 1-Ch, 14-bit X 1-Ch, 16-bit X 16-Ch
R5F562TAHD FF#V3	-	-	100 MHz	−40° C	+85 °C	16 KB	256 KB	SCI, I2C, SPI, CAN, LIN	10-bit X 12-Ch, 12-bit X 8-Ch	1	1	3	8-bit X 1-Ch, 14-bit X 1-Ch, 16-bit X 16-Ch

A.4   Footprint Design Information

A.4.1   64-LFQFP

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

Description	Dimension	Value (mm)	Diagram
Minimum lead span (vertical side)	Dmin	12.2	
Maximum lead span (vertical side)	Dmax	12.2	
Minimum lead span (horizontal side)	Emin	12.2	
Maximum lead span (horizontal side)	Emax	12.2	
Minimum body span (vertical side)	D1min	10.1	
Maximum body span (vertical side)	D1max	10.1	
Minimum body span (horizontal side)	E1min	10.1	
Maximum body span (horizontal side)	E1max	10.1	
Minimum Lead Width	Bmin	0.15	
Maximum Lead Width	Bmax	0.25	
Minimum Lead Length	Lmin	0.35	
Maximum Lead Length	Lmax	0.65	
Maximum Height	Amax	1.7	
Minimum Standoff Height	A1min	0.05	
Minimum Lead Thickness	cmin	0.09	
Maximum Lead Thickness	cmax	0.2	
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	-	
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.4.2 112-LQFP

IPC Footprint Type	Package Code/ POD number	Number of Pins
QFP	PLQP0112JA-A	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	0.35	
Maximum Lead Length	Lmax	0.65	
Maximum Height	Amax	1.7	
Minimum Standoff Height	A1min	0.05	
Minimum Lead Thickness	cmin	0.09	
Maximum Lead Thickness	cmax	0.2	
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.4.3 **80-LQFP**

IPC Footprint Type	Package Code/ POD number	Number of Pins
QFP	PLQP0080JA-A	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	0.27	
Maximum Lead Width	Bmax	0.37	
Minimum Lead Length	Lmin	0.35	
Maximum Lead Length	Lmax	0.65	
Maximum Height	Amax	1.7	
Minimum Standoff Height	A1min	0.05	
Minimum Lead Thickness	cmin	0.09	
Maximum Lead Thickness	cmax	0.2	
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	-	