

Legend - Color Code	Notes
Power Supply	
Ground Reference	
External ADC	
Trigger	
Dynamic Register	Shift Register for Channel Selection (Channel Multiplex). Charge Read out Control,
Static Register	Configuration Register i.e. slow control, daisy chained
Internal ADC	never used, need firmware , some test point for debugging
ENABLE	ask about this EN. OTA controlled TTL directly from FPG
Test Pulse	fixed charge to chek dead channels, having 2 or 3 (fixed) charges usefull for calibration, idea= fpga generate durations (1,3,5 ns), asic board the amplitude.
MASKED OR	
BINARY OUT CH 63	

ERF5 = PIN_ID on the connector

Name = Signal name

J = 5 or 6 identify the component on electronic CAD

The Other columns are useful for changing ordering and cross checking while working on spreadsheet;
they are: an arbitrary ID (ID), a counter for power lines (C), the maroc pin (mrc) if there is one and a flag to identify the usage on the board (code 1,2,3 for single asic, 4 for parallel line, 0 everywhere)

ERF5	Name	J	ID	C	asic	mrc
1	GND	6	2	1	0	none
2	GND	6	2	2	0	none
3	OUT_1_62	6	43		1	119
4	OUT_1_63	6	40		1	118
5	OUT_1_60	6	49		1	121
6	OUT_1_61	6	46		1	120
7	OUT_1_58	6	55		1	123
8	OUT_1_59	6	52		1	122
9	OUT_1_56	6	61		1	125
10	OUT_1_57	6	58		1	124
11	OUT_1_54	6	67		1	127
12	OUT_1_55	6	64		1	126
13	OUT_1_52	6	73		1	129
14	OUT_1_53	6	70		1	128
15	OUT_1_50	6	79		1	131
16	OUT_1_51	6	76		1	130
17	OUT_1_48	6	85		1	133
18	OUT_1_49	6	82		1	132
19	GND	6	2	3	0	none
20	GND	6	2	4	0	none
21	OUT_1_46	6	91		1	135
22	OUT_1_47	6	88		1	134
23	OUT_1_44	6	97		1	137
24	OUT_1_45	6	94		1	136
25	OUT_1_42	6	103		1	139
26	OUT_1_43	6	100		1	138
27	OUT_1_40	6	109		1	141
28	OUT_1_41	6	106		1	140
29	OUT_1_38	6	115		1	143
30	OUT_1_39	6	112		1	142
31	OUT_1_36	6	121		1	145
32	OUT_1_37	6	118		1	144
33	OUT_1_34	6	127		1	147
34	OUT_1_35	6	124		1	146
35	OUT_1_32	6	133		1	149
36	OUT_1_33	6	130		1	148
37	GND	6	2	5	0	none
38	GND	6	2	6	0	none
39	OUT_1_30	6	139		1	152
40	OUT_1_31	6	136		1	151
41	OUT_1_28	6	145		1	154
42	OUT_1_29	6	142		1	153
43	OUT_1_26	6	151		1	156
44	OUT_1_27	6	148		1	155
45	OUT_1_24	6	157		1	158
46	OUT_1_25	6	154		1	157
47	OUT_1_22	6	163		1	160
48	OUT_1_23	6	160		1	159
49	OUT_1_20	6	169		1	162
50	OUT_1_21	6	166		1	161
51	OUT_1_18	6	175		1	164
52	OUT_1_19	6	172		1	163
53	OUT_1_16	6	181		1	166
54	OUT_1_17	6	178		1	165
55	GND	6	2	7	0	none
56	GND	6	2	8	0	none
57	OUT_1_14	6	187		1	168
58	OUT_1_15	6	184		1	167
59	OUT_1_12	6	193		1	170
60	OUT_1_13	6	190		1	169
61	OUT_1_10	6	199		1	172
62	OUT_1_11	6	196		1	171
63	OUT_1_8	6	205		1	174
64	OUT_1_9	6	202		1	173
65	OUT_1_6	6	211		1	176
66	OUT_1_7	6	208		1	175
67	OUT_1_4	6	217		1	178
68	OUT_1_5	6	214		1	177
69	OUT_1_2	6	223		1	180
70	OUT_1_3	6	220		1	179
71	OUT_1_0	6	229		1	182
72	OUT_1_1	6	226		1	181
73	GND	6	2	9	0	none
74	GND	6	2	10	0	none
75	CK SC	6	21		4	68
76	OR_1_0	6	34		1	191
77	RSTn SC	6	19		4	66
78	OR_1_1	6	37		1	192
79	D SC 1	6	18		1	64
80	DOU EXT ADC 1	6	5		1	none
81	GND	6	2	11	0	none
82	VDD	6	1	1	0	none
83	GND	6	2	12	0	none
84	VDD	6	1	2	0	none
85	GND	6	2	13	0	none
86	VDD	6	1	3	0	none
87	GND	6	2	14	0	none
88	VDD	6	1	4	0	none
89	GND	6	2	15	0	none
90	VDD	6	1	5	0	none
91	GND	6	2	16	0	none
92	VDD	6	1	6	0	none
93	D R	6	15		1	82
94	TrasmitON 1	6	22		1	114
95	OUT ADC 1	6	25		1	115
96	TrasmitON 2	6	23		2	114
97	OUT ADC 2	6	26		2	115
98	Qbuf R 1	6	10		1	76
99	start ADCb	6	28		4	116
100	CK 40M	6	31		4	188
101	RST ADCb	6	29		4	184
102	CKb 40M	6	30		4	186
103	GND	6	2	17	0	none
104	GND	6	2	18	0	none
105	OUT_2_62	6	44		2	119
106	OUT_2_63	6	41		2	118
107	OUT_2_60	6	50		2	121
108	OUT_2_61	6	47		2	120
109	OUT_2_58	6	56		2	123
110	OUT_2_59	6	53		2	122
111	OUT_2_56	6	62		2	125
112	OUT_2_57	6	59		2	124
113	OUT_2_54	6	68		2	127
114	OUT_2_55	6	65		2	126
115	OUT_2_52	6	74		2	129
116	OUT_2_53	6	71		2	128
117	OUT_2_50	6	80		2	131
118	OUT_2_51	6	77		2	130
119	OUT_2_48	6	86		2	133
120	OUT_2_49	6	83		2	132
121	GND	6	2	19	0	none
122	GND	6	2	20	0	none
123	OUT_2_46	6	92		2	135
124	OUT_2_47	6	89		2	134
125	OUT_2_44	6	98		2	137
126	OUT_2_45	6	95		2	136
127	OUT_2_42	6	104		2	139
128	OUT_2_43	6	101		2	138
129	OUT_2_40	6	110		2	141
130	OUT_2_41	6	107		2	140
131	OUT_2_38	6	116		2	143
132	OUT_2_39	6	113		2	142
133	OUT_2_36	6	122		2	145
134	OUT_2_37	6	119		2	144
135	OUT_2_34	6	128		2	147
136	OUT_2_35	6	125		2	146
137	OUT_2_32	6	134		2	149
138	OUT_2_33	6	131		2	148
139	GND	6	2	21	0	none
140	GND	6	2	22	0	none

ERF5	Name	J	ID	C	asic	mrc
1	GND	5	2	1	0	none
2	GND	5	2	2	0	none
3	OUT_2_30	5	140		2	152
4	OUT_2_31	5	137		2	151
5	OUT_2_28	5	146		2	154
6	OUT_2_29	5	143		2	153
7	OUT_2_26	5	152		2	156
8	OUT_2_27	5	149		2	155
9	OUT_2_24	5	158		2	158
10	OUT_2_25	5	155		2	157
11	OUT_2_22	5	164		2	160
12	OUT_2_23	5	161		2	159
13	OUT_2_20	5	170		2	162
14	OUT_2_21	5	167		2	161
15	OUT_2_18	5	176		2	164
16	OUT_2_19	5	173		2	163
17	OUT_2_16	5	182		2	166
18	OUT_2_17	5	179		2	165
19	GND	5	2	3	0	none
20	GND	5	2	4	0	none
21	OUT_2_14	5	188		2	168
22	OUT_2_15	5	185		2	167
23	OUT_2_12	5	194		2	170
24	OUT_2_13	5	191		2	169
25	OUT_2_10	5	200		2	172
26	OUT_2_11	5	197		2	171
27	OUT_2_8	5	206		2	174
28	OUT_2_9	5	203		2	173
29	OUT_2_6	5	212		2	176
30	OUT_2_7	5	209		2	175
31	OUT_2_4	5	218		2	178
32	OUT_2_5	5	215		2	177
33	OUT_2_2	5	224		2	180
34	OUT_2_3	5	221		2	179
35	OUT_2_0	5	230		2	182
36	OUT_2_1	5	227		2	181
37	GND	5	2	5	0	none
38	GND	5	2	6	0	none
39	TrasmitON 3	6	24		3	114
40	OR_2_0	5	35		2	191
41	Qbuf R 2	5	11		2	76
42	OR_2_1	5	38		2	192
43	Qbuf R 3	5	12		3	76
44	EN otaq_fromFpga	5	32		4	213
45	Hold1	5	8		4	79
46	EN_EXT ADC	5	3		4	none
47	Hold2	5	9		4	81
48	CK_EXT ADC	5	4		4	none
49	RSTb R	5	14		4	80
50	Qbuf SC 3	5	20		3	199
51	CK R	5	13		4	78
52	DOU EXT ADC 2	5	6		2	none
53	OUT ADC 3	5	27		3	115
54	DOU EXT ADC 3	5	7		3	none
55	GND	5	2	7	0	none
56	VDD	5	1	1	0	none
57	GND	5	2	8	0	none
58	VDD	5	1	2	0	none
59	GND	5	2	9	0	none
60	VDD	5	1	3	0	none
61	Ctest	5	33		4	234
62	VDD	5	1	4	0	none
63	GND	5	2	10	0	none
64	VDD	5	1	5	0	none
65	OR_3_0	5	36		3	191
66	OR_3_1	5	39		3	192
67	GND	5	2	11	0	none
68	GND	5	2	12	0	none
69	OUT_3_62	5	45		3	119
70	OUT_3_63	5	42		3	118
71	OUT_3_60	5	51		3	121
72	OUT_3_61	5	48		3	120
73	OUT_3_58	5	57		3	123
74	OUT_3_59	5	54		3	122
75	OUT_3_56	5	63		3	125
76	OUT_3_57	5	60		3	124
77	OUT_3_54	5	69		3	127
78	OUT_3_55	5	66		3	126
79						