DUMMY TAIL PCBS 1 of 2 REV3.1 Tony smith 17/04/05

JM A,B,C,D ARE 20 PIN HEADERS WHICH ALLOW THE 5 CONTROL LINES ARRIVING ON J4 TO BE CONNECTED ACROSS TO J11 WHEN USING THE NIKHEF HYBRID
THE BOARD HAS CUTTABLE LINKS BETWEEN JMA AND JMB TO PROVIDE A DEFAULT FOR THE LIVERPOOL HYBRID, FOR THE NIKHEF HYBRID A 20 WAY RIBBON CABLE IS REQUIRED BETWEEN JMC AND JMB.
EVEN NUMBERED PINS ON THESE CONNECTORS ARE GROUNDED

JM A,B,C,D ARE 20 PIN HEADERS WHICH ALLOW THE 5 CONTROL LINES ARRIVING

LONG TAIL A (SHORTEST IN EXPERIMENT with Lpool Hybrid)

AMP 177983-4 receptacle

J1

JMA3 JMB3
JMA1 JMB1
JMA7 JMB7
JMA5 JMB5
JMA13 JMB13
JMA15 JMB15
JMA17 JMB17
JMA19 JMB19
JMA9 JMB9
JMA11 JMB11

USE MALE PART IF NOT USING FEEDTHROUGHS → 50 WAY CANNON FEMALE NUMBERED AS MALE PART

J11

GND	GND	50	50
VCC0	VCC0	17	17
S22_p	sense0+	33	33
S22_n	sense0-	49	49
S21_p	SDA	16	16
S21_n	SDARET	32	32
S20_p	ANA1-3	48	48
S20_n	ANA1-3N	15	15
S19_p	ANA1-2	31	31
S19_n	ANA1-2N	47	47
S18_p	ANA1-1	14	14
S18_n	ANA1-1N	30	30
S17_p	ANA1-0	46	46
S17_n	ANA1-0N	13	13
S16_p	ANA0-3	29	29
S16_n	ANA0-3N	45	45
S15_p	ANA0-2	12	12
S15_n	ANA0-2N	28	28
S14_p	ANA0-1	44	44
S14_n	ANA0-1N	11	11
S13_p	ANA0-0	27	27
S13_n	ANA0-0N	43	43
S12_p	COMPCLK	10	10
S12_n	COMPCLKN	26	26
GND	GND	42	42
VCC0	VCC0	9	9
S11_p	SCL	25	25
S11_n	SCL_RET	41	41
S10_p	ANA3-3	8	8
S10_n	ANA3-3N	24	24
S9_p	ANA3-2	40	40
S9_n	ANA3-2N	7	7
S8_p	ANA3-1	23	23
S8_n	ANA3-1N	39	39
S7_p	ANA3-0	6	6
S7_n	ANA3-0N	22	22
S6_p	ANA2-3	38	38
S6_n	ANA2-3N	5	5
S5_p	ANA2-2	21	21
S5_n	ANA2-2N	37	37
S4_p	ANA2-1	4	4
S4_n	ANA2-1N	20	20
S3_p	ANA2-0	36	36
S3_n	ANA2-0N	3	3
S2_p	CLOCK	19	19
S2_n	CLOCKN	35	35
S1_p	TRIGGER	2	2
S1_n	TRIGGERN	18	18
GND	GND	34	34
VCC0	VCC0	1	1

FT11 FEEDTHROUGH

K11 50 WAY CANNON FEMALE

50	50	GND	GND
17	17	VCC0	VCC0
33	33	sense0+	sense0+
49	49	sense0-	sense0-
16	16	SDA	SDA
32	32	SDARET	SDARET
48	48	ANA1-3	ANA1-3
15	15	ANA1-3N	ANA1-3N
31	31	ANA1-2	ANA1-2
47	47	ANA1-2N	ANA1-2N
14	14	ANA1-1	ANA1-1
30	30	ANA1-1N	ANA1-1N
46	46	ANA1-0	ANA1-0
13	13	ANA1-0N	ANA1-0N
29	29	ANA0-3	ANA0-3
45	45	ANA0-3N	ANA0-3N
12	12	ANA0-2	ANA0-2
28	28	ANA0-2N	ANA0-2N
44	44	ANA0-1	ANA0-1
11	11	ANA0-1N	ANA0-1N
27	27	ANA0-0	ANA0-0
43	43	ANA0-0N	ANA0-0N
10	10	COMPCLK	COMPCLK
26	26	COMPCLKN	COMPCLKN
42	42	GND	GND
9	9	VCC0	VCC0
25	25	SCL	SCL
41	41	SCL_RET	SCL_RET
8	8	ANA3-3	ANA3-3
24	24	ANA3-3N	ANA3-3N
40	40	ANA3-2	ANA3-2
7	7	ANA3-2N	ANA3-2N
23	23	ANA3-1	ANA3-1
39	39	ANA3-1N	ANA3-1N
6	6	ANA3-0	ANA3-0
22	22	ANA3-0N	ANA3-0N
38	38	ANA2-3	ANA2-3
5	5	ANA2-3N	ANA2-3N
21	21	ANA2-2	ANA2-2
37	37	ANA2-2N	ANA2-2N
4	4	ANA2-1	ANA2-1
20	20	ANA2-1N	ANA2-1N
36	36	ANA2-0	ANA2-0
3	3	ANA2-0N	ANA2-0N
19	19	CLOCK	CLOCK
35	35	CLOCKN	CLOCKN
2	2	TRIGGER	TRIGGER
18	18	TRIGGERN	TRIGGERN
34	34	GND	GND
1	1	VCC0	VCC0

LIVERPOOL HYBRID

LONG TAIL B

AMP 177983-4 receptacle

J2

USE MALE PART IF NOT USING FEEDTHROUGHS → 50 WAY CANNON FEMALE NUMBERED AS MALE PART

J12

GND	GND	50	50
VCC1	VCC1	17	17
S22_p	NTCB	33	33
S22_n	NTCA	49	49
S21_p	NTCA2	16	16
S21_n	NTCB2	32	32
S20_p	ANA5-3	48	48
S20_n	ANA5-3N	15	15
S19_p	ANA5-2	31	31
S19_n	ANA5-2N	47	47
S18_p	ANA5-1	14	14
S18_n	ANA5-1N	30	30
S17_p	ANA5-0	46	46
S17_n	ANA5-0N	13	13
S16_p	ANA4-3	29	29
S16_n	ANA4-3N	45	45
S15_p	ANA4-2	12	12
S15_n	ANA4-2N	28	28
S14_p	ANA4-1	44	44
S14_n	ANA4-1N	11	11
S13_p	ANA4-0	27	27
S13_n	ANA4-0N	43	43
S12_p	ARDMONA	10	10
S12_n	ARDMONB	26	26
GND	GND	42	42
VCC1	VCC1	9	9
S11_p	TEMPV+	25	25
S11_n	TEMPLEFT	41	41
S10_p	ANA7-3	8	8
S10_n	ANA7-3N	24	24
S9_p	ANA7-2	40	40
S9_n	ANA7-2N	7	7
S8_p	ANA7-1	23	23
S8_n	ANA7-1N	39	39
S7_p	ANA7-0	6	6
S7_n	ANA7-0N	22	22
S6_p	ANA6-3	38	38
S6_n	ANA6-3N	5	5
S5_p	ANA6-2	21	21
S5_n	ANA6-2N	37	37
S4_p	ANA6-1	4	4
S4_n	ANA6-1N	20	20
S3_p	ANA6-0	36	36
S3_n	ANA6-0N	3	3
S2_p	TEMPMID	19	19
S2_n	TEMPRIGHT	35	35
S1_p	sense1+	2	2
S1_n	sense1-	18	18
GND	GND	34	34
VCC1	VCC1	1	1

FT12 FEEDTHROUGH

K12 50 WAY CANNON FEMALE

50	50	GND	GND
17	17	VCC1	VCC1
33	33	NTCB	NTCB
49	49	NTCA	NTCA
16	16	NTCA2	NTCA2
32	32	NTCB2	NTCB2
48	48	ANA5-3	ANA5-3
15	15	ANA5-3N	ANA5-3N
31	31	ANA5-2	ANA5-2
47	47	ANA5-2N	ANA5-2N
14	14	ANA5-1	ANA5-1
30	30	ANA5-1N	ANA5-1N
46	46	ANA5-0	ANA5-0
13	13	ANA5-0N	ANA5-0N
29	29	ANA4-3	ANA4-3
45	45	ANA4-3N	ANA4-3N
12	12	ANA4-2	ANA4-2
28	28	ANA4-2N	ANA4-2N
44	44	ANA4-1	ANA4-1
11	11	ANA4-1N	ANA4-1N
27	27	ANA4-0	ANA4-0
43	43	ANA4-0N	ANA4-0N
10	10	ARDMONA	ARDMONA
26	26	ARDMONB	ARDMONB
42	42	GND	GND
9	9	VCC1	VCC1
25	25	TEMPV+	TEMPV+
41	41	TEMPLEFT	TEMPLEFT
8	8	ANA7-3	ANA7-3
24	24	ANA7-3N	ANA7-3N
40	40	ANA7-2	ANA7-2
7	7	ANA7-2N	ANA7-2N
23	23	ANA7-1	ANA7-1
39	39	ANA7-1N	ANA7-1N
6	6	ANA7-0	ANA7-0
22	22	ANA7-0N	ANA7-0N
38	38	ANA6-3	ANA6-3
5	5	ANA6-3N	ANA6-3N
21	21	ANA6-2	ANA6-2
37	37	ANA6-2N	ANA6-2N
4	4	ANA6-1	ANA6-1
20	20	ANA6-1N	ANA6-1N
36	36	ANA6-0	ANA6-0
3	3	ANA6-0N	ANA6-0N
19	19	TEMPMID	TEMPMID
35	35	TEMPRIGHT	TEMPRIGHT
2	2	sense1+	sense1+
18	18	sense1-	sense1-
34	34	GND	GND
1	1	VCC1	VCC1