LED PCB cables.or	de			07/10/2013									1 of 2
		o host 2 ADC16x250-8 coax 2 boards		07/10/2013									1012
	•	nodified to host 2 ADC16x250-8 rj45 rev 1 boards.											
THE Standard LLD I	CD can be used with a chassis in	bounce to nost 2 ADC10X230 0 1343 TeV 1 Bourds.											
date	2013jun28												
revision	1.0	Revision 1 of the BOM for the LED PCB compatible with the ADC16x250-8 coax rev 2 chassis											
qty to build	25	RAL has built 10 units. 9 for RAL use and 1 as a sample											
Qty						Distributor	Qty	Qty	Qty	unit	net		cost per
Per													
Item PCB	Reference Designators	Description	Vendor	Part Number	Distributor	Order Number	req	stk	buy	price	PO cost	comments	board
1 3 C1, C2	2, C3	0.1uF 10V 10% X5R 0402 1.V5 and 3.3V bypass. ESR not specified; not a low ESR part	Murata	GRM155R61A104KA01D	Digikey	490-1318-1-ND	75	0	75	\$0.01	\$0.50	cut tape round up to qty = 100 for spares	\$0.02
2 4 D1, D2	2, D3, D4	green (562nm) diffused size T-1 LED. 10 mcd, Vforward 2.2V	Chicago miniature lighting	4303F5	Mouser	606-4303F5	100	0	100	\$0.14	\$14.00	individual pieces	\$0.56
3 1 D5		Red (50nm) diffused size T-1 LED. 10 mcd, Vforward 2.2V	Chicago miniature lighting	4303F1	Mouser	606-4303F1	25	0	25	\$0.16	\$4.00	individual pieces	\$0.16
4 1 J1		5 x 2 vertical header, 0.1" pitch, .025 square pins. No shroud	TE connectivity	87215-2	Digikey	A26572-ND	25	0	25	\$4.85	\$121.33	individual pieces	\$4.85
5 1 J2		4 x 2 vertical header, 0.1" pitch, .025 square pins. No shroud	TE connectivity	87215-1	Digikey	A26570-ND	25	0	25	\$3.59	\$89.75	individual pieces	\$3.59
6 2 J3, J4		2 x 2 vertical header, 0.1" pitch, .025 square pins. No shroud	TE connectivity	1-87215-0	Digikey	A26564-ND	50	0	50	\$1.20	\$60.19	individual pieces	\$2.41
7 5 R5, R6	6, R7, R11, R12	180 ohm 1% 1/16 Watt TCR +/- 100 PPM 0402	Yageo	RC0402FR-07180RL	Digikey	311-180LRCT-ND	125	0	125	\$0.01	\$0.79	cut tape	\$0.03
8 4 R1, R2	2, R3, R4	3.3k ohm 5% 1/16 Watt thick film 0402	Yageo	RC0402JR-073K3L	Digikey	311-3.3KJRCT-ND	100	0	100	\$0.01	\$0.55	cut tape	\$0.02
9 4 R8, R9	9, R10, R13	10k ohm 5% 1/16 Watt thick film 0402	Yageo	RC0402JR-0710KL	Digikey	311-10KJRCT-ND	100	0	100	\$0.01	\$0.55	cut tape	\$0.02
10 1 U1		4 bit dual-supply transceiver 20pin TSSOP	TI	SN74AVC4T245PW	Digikey	296-18056-1-ND	25	0	25	\$0.86	\$21.60	cut tape	\$0.86
11 1 blank I	РСВ	x" by Y" PCB					25	0	25	\$10.00	\$250.00	individual pieces	\$10.00
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CABLE ASSEMBLIES										
12 1 4 x 2 conn housing for LED PCB J2 2 x 4 0.1" x0.1" pitch connector housing	TE connectivity	87456-4	Mouser	571-874564	25 () 2!	5 \$1.31	\$32.83	individual pieces	\$1.31
13 1 1 x 2 conn housing for Roach2 P14 1 x 2 0.1" x 0.1" pitch connector h		87499-3	Digikey	A3011-ND	25 () 2!	5 \$1.10	\$27.50	individual pieces	\$1.10
14 1 7 x 2 conn housing for Roach2 P16 7 x 2 0.1" x 0.1" pitch connector h		1-87456-0	Digikey	A3036-ND	25 () 2!	5 \$1.81	\$45.28	individual pieces	\$1.81
15 1 5 x 2 conn housing for LED PCB J1 5 x 2 0.1" x 0.1" pitch connector housing	TE connectivity TE	87456-6	Digikey	A3034-ND	25 () 2!	5 \$1.31	\$32.83	individual pieces	\$1.31
16 1 10 x 2 conn housing for Roach2 P15 10 x 2 0.1" x 0.1" pitch connector h	ousing connectivity	102387-4	Digikey	A25904-ND	25 () 2!	5 \$2.86	\$71.56	individual pieces	\$2.86
For various length twisted wire assemble post twist lengths of 1 @ 16, 2 @ 15 and 250V hookup wire 19"	d 5 @ Belden	83048 010100	Allied Elec	70003564	360.42	0 4	\$47.84	\$191.36	\$48/100 foot roll	\$6.90
Orange teflon coated 24 AWG stranded 16" long after twist w/ black wire; estin 250V hookup wire pretwist length at 20" or 1.67 ft	Belden	83048 003100	Allied Elec	70003568	41.667) 1	\$47.84	\$47.84	\$48/100 foot roll	\$0.80
Red teflon coated 24 AWG stranded 250V 1 @ 15" and 1 @ 19" long after twist w/ hookup wire; estimate pretwist length at 19" and	d 23" Belden	83048 002100	Allied Elec	70003565	87.5) 1	. \$47.84	\$47.84	\$48/100 foot roll	\$1.67
Yellow teflon coated 24 AWG stranded 1 @ 15" and 1 @ 19" long after twist w/ 250V hookup wire wire; estimate pretwist length at 19" and	d 23" Belden	83003 004100	Allied Elec	70003396	87.5) 1	\$48.76	\$48.76	\$49/100 foot roll	\$1.71
White teflon coated 24 AWG stranded 1 @ 15" and 0 @ 19" long after twist w/ 21 1.583 250V hookup wire wire; estimate pretwist length at 19" and	d 23" Belden	83003 009100	Allied Elec	70003392	39.583) 1	. \$48.76	\$48.76	\$49/100 foot roll	\$0.77
Green teflon coated 24 AWG stranded 1 @ 15" and 0 @ 19" long after twist w/ 22 1.583 250V hookup wire wire; estimate pretwist length at 19" and	d 23" Belden	83048 005100	Allied Elec	70003566	39.583) 1	. \$47.84	\$47.84	\$48/100 foot roll	\$0.76
Brown teflon coated 24 AWG stranded 0 @ 15" and 1 @ 19" long after twist w/ 23 1.917 250V hookup wire wire; estimate pretwist length at 19" and	d 23" Belden	83048 001100	Allied Elec	70003570	47.917) 1	. \$47.84	\$47.84	\$48/100 foot roll	\$0.92
Blue teflon coated 24 AWG stranded 250V 0 @ 15" and 1 @ 19" long after twist w/ hookup wire wire; estimate pretwist length at 19" and	d 23" Belden	83003 006100	Allied Elec	70003397	47.917) 1	. \$48.76	\$48.76	\$49/100 foot roll	\$0.93
Violet teflon coated 24 AWG stranded 0 @ 15" and 1 @ 19" long after twist w/ 25 1.917 250V hookup wire wire; estimate pretwist length at 19" and	d 23" Belden	83048 001100	Allied Elec	70003570	47.917) 1	. \$47.84	\$47.84	\$48/100 foot roll	\$0.92
crimp terminal for the above housings, 22-26 awg crimp terminal 30 micro inch both ends 22-26 awg crimp terminal 30 micro inch	connectivity		Digikey	A25976-ND		90	0 \$0.40	\$360.62	individual pieces	\$14.42
Please note: the two @ ~ 3" long twisted cable assemblies from the power and reset buttons to the	LED PCB, as spec	ified in the Roach2 enclosure	BOM are used	, with no modifications in	n these chas	ssis				
Items RAL has already ordered and will provide to Digicom asap										
Post stuff and solder components										
screw to hold the LED PCB to the Roach2 enclosure's M2.5 thru hole threaded captive (or insert) standoff. Alternative #M2.5 0.45mm pitch 12.9 alloy steel soci	vot MoMASTED	M2 0.45mm bag of 100 or if #3-48 insert used then	Manageter	M2.5 0.45mm: 91290A101 or if #3-48 insert used then :#3-48:					Or is it #3-48 black oxide alloy steel socket head cap screw x 0.25" long for#3-48 captive nut ???? \$3.48 only	
1 1 solution uses #3-48 standoff and screw head cap screw. Length 6mm	CARR	#3-48: bag of 100:	CARR	91251A092	0.01	0.0	\$0.13	\$0.00	\$6.04/100	\$0.13
										\$60.86