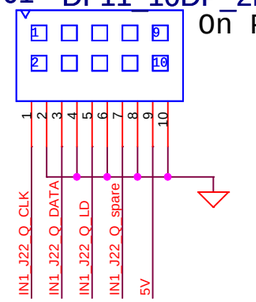
J1 DF11_10DP_2DS_52

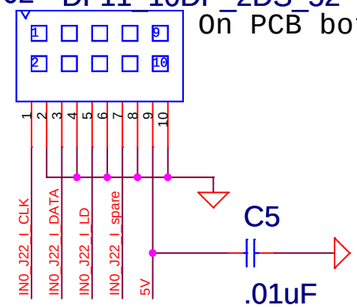


On PCB Top

GREEN

connects to HiRose DF11-10DS-2C,
and via twisted pair wires to
the electrical feed thrus on the
attemplifier modules.

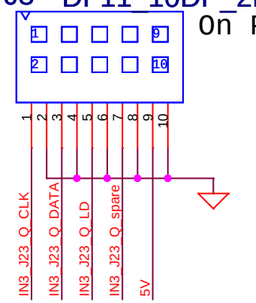
J2 DF11_10DP_2DS_52



On PCB bottom

BLUE

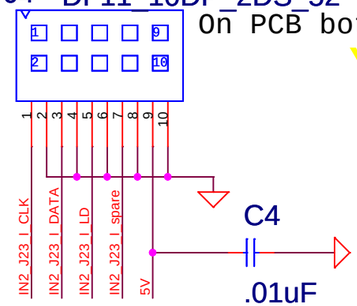
J3 DF11_10DP_2DS_52



On PCB Top

RED

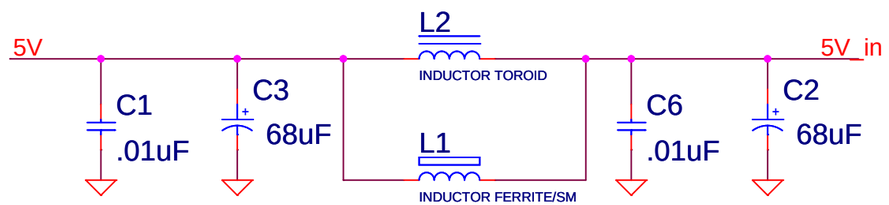
J4 DF11_10DP_2DS_52



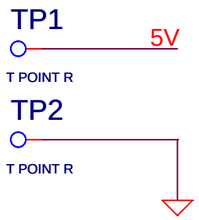
On PCB bottom

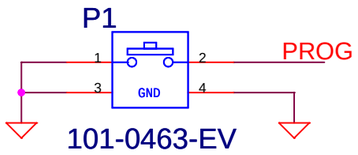
YELLOW

The plan is to installed C2 and C3 and not
populate C1, C4,C5 and C6.



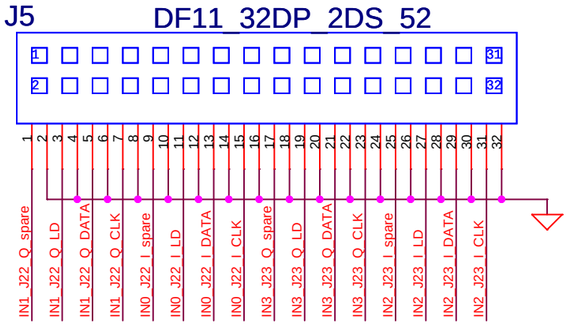
Either L1 or L2 is
installed. Not both.





Reset button for
the iBob's FPGA.
button is parallel
to plane of PCB

J5 DF11_32DP_2DS_52

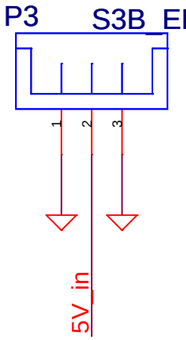


On PCB bottom

connects to HiRose DF11-32DS-2C,
and via twisted pair wires :
J5-1 to iBob J9-1 and J5-2 to J9-2
and so on.
still thinking about
cable assembly options.

GREEN BLUE RED YELLOW

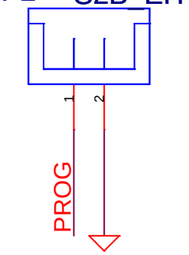
P3 S3B_EH



On PCB Top

connects to JST EHR-3
and via twisted pair wires :
J6-2 to iBob J19-1 and J19-2
J6-1 and J6-3 to iBob J19-3 and J19-4

P2 S2B_EH



On PCB Top

connects to JST EHR-2
and via twisted pair wires to
2 pin socket housing on 0.1" pitch
J7-1 to iBob J1-1 and
J7-2 to iBob J1-2.

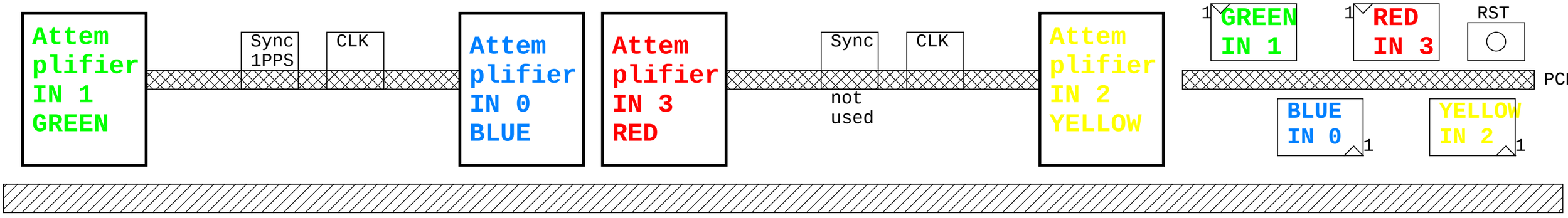
C:\ata\correlator\production\iBob\Schematics\attemplifier_iface.opj

Title: interface board for 4-way attemplifier control

Size: Custom | Document Number: attemplifier_iface: schematic1: schematics | Rev: 1.0

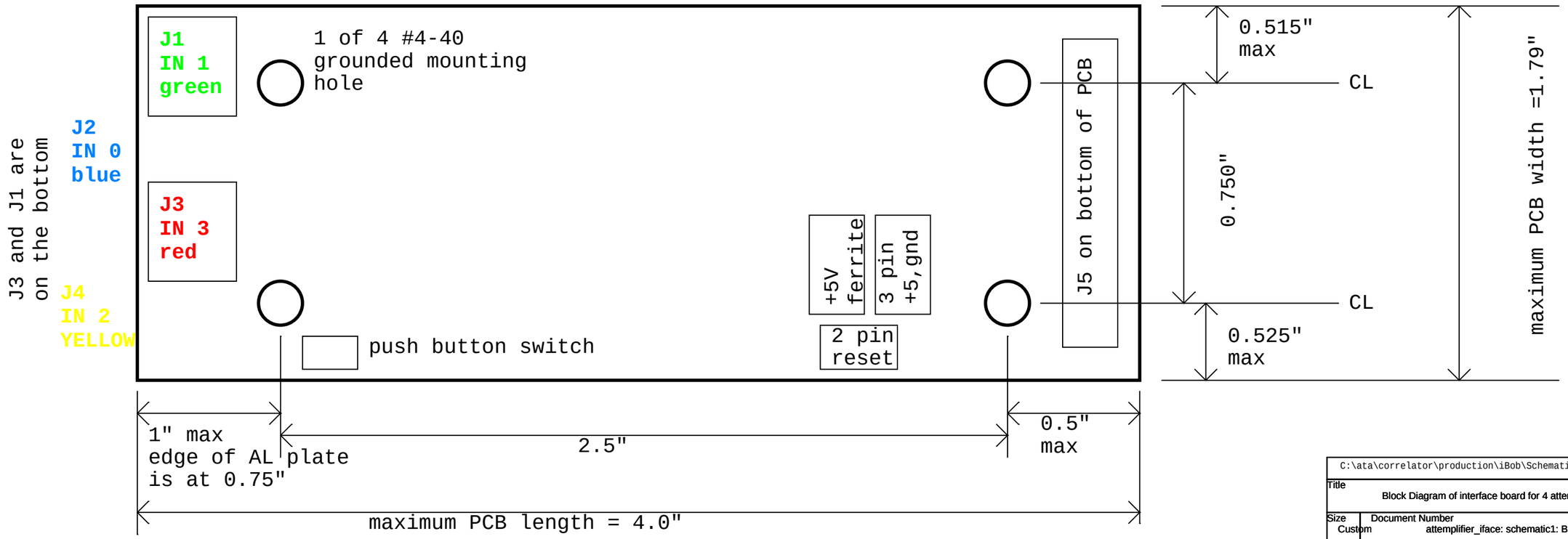
Date: Monday, April 07, 2008 | Sheet 1 of 1

Edge on view from the back of the iBob + iADC chassis



NOT TO SCALE

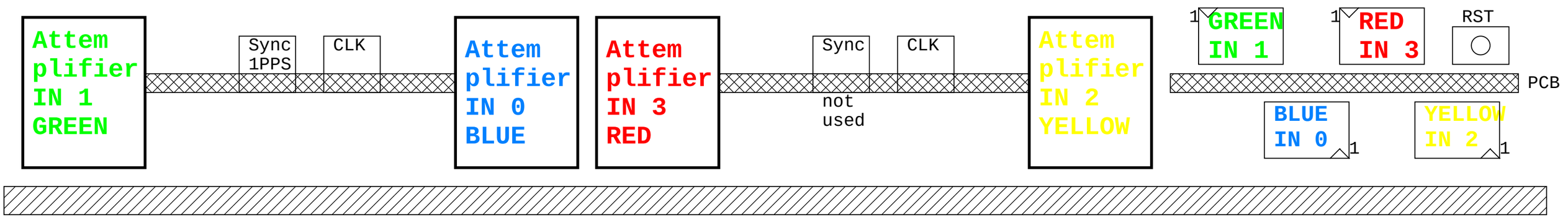
PCB will rest on 4 #4-40 0.25" tall swage standoffs. P/N is TBD. And be held down with #4 5/8" screw. OD of standoffs is 0.25"



C:\ata\correlator\production\iBob\Schematics\attemplifier_iface.opj

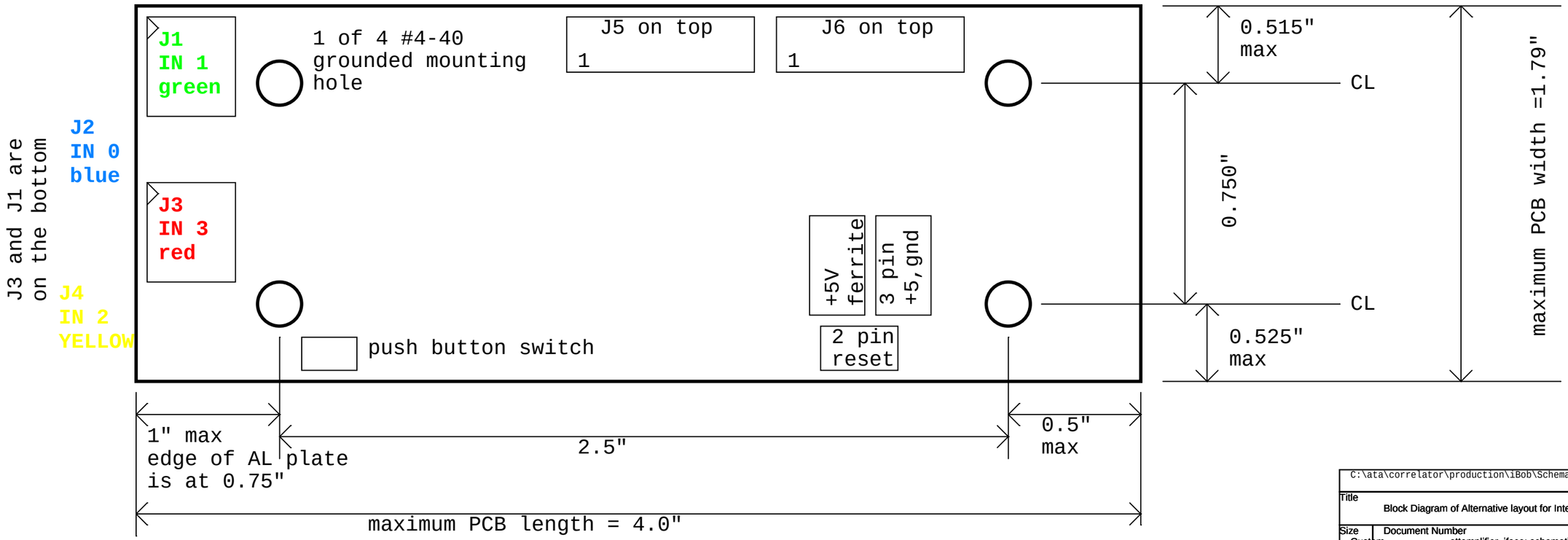
Title: Block Diagram of interface board for 4 attemplifiers		
Size: Custom	Document Number: attemplifier_iface: schematic1: Block Diagram	Rev: 1.0
Date: Monday, April 07, 2008	Sheet 1 of 1	

Edge on view from the back of the iBob + iADC chassis



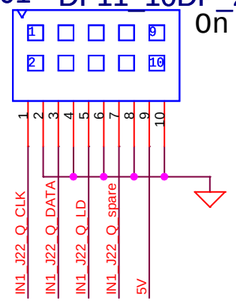
NOT TO SCALE

PCB will rest on 4 #4-40 0.25" tall swage standoffs. P/N is TBD. And be held down with #4 5/8" screw. OD of standoffs is 0.25"



C:\ata\correlator\production\iBob\Schematics\attemplifier_iface.opj	
Title	Block Diagram of Alternative layout for Interface board for 4 attemplifiers
Size: Custom	Document Number: attemplifier_iface: schematic1: Block Diagram 2 — Rev: 1.0
Date: Monday, April 07, 2008	Sheet 1 of 1

J1 DF11_10DP_2DS_52
On PCB Top

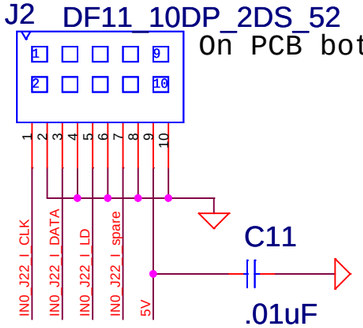


GREEN

connects to HiRose DF11-10DS-2C,
and via twisted pair wires to
the electrical feed thrus on the
attemplifier modules.

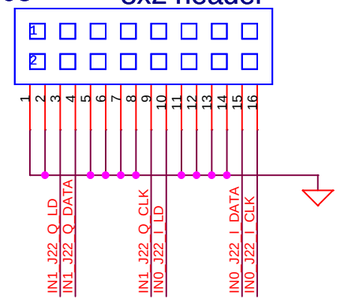
J2 DF11_10DP_2DS_52
On PCB bottom

BLUE



On PCB top

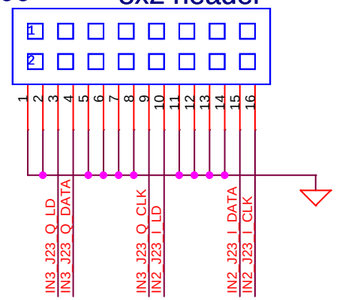
J5 8x2 header



GREEN **BLUE**

On PCB top

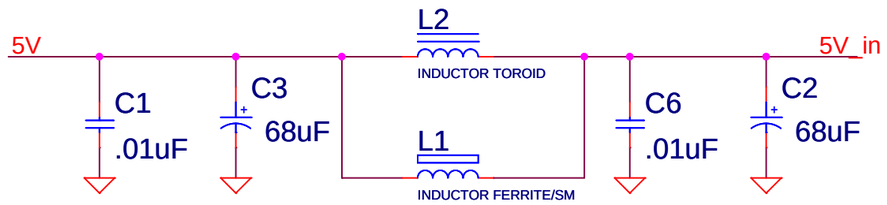
J6 8x2 header



RED **YELLOW**

connects to "standard" 8x2 IDC cable assembly
J5-1 to iBob J6-30 = gnd
J5-2 to iBob J6-32 = gnd
J5-3 to iBob J6-29 = GPIO0.14
J5-4 to iBob J6-31 = GPIO0.15
J5-5 and J5-6 are NC at iBob end
J5-7 to iBob J7-30 = gnd
J5-8 to iBob J7-32 = gnd
J5-9 to iBob J7-29 = GPIO1.14
J5-10 to iBob J7-31 = GPIO1.15
J5-11 and J5-12 are NC at iBob end
J5-13 to iBob J9-30 = gnd
J5-14 to iBob J9-32 = gnd
J5-15 to iBob J9-29 = GPIO3.14
J5-16 to iBob J9-31 = GPIO3.15

The plan is to installed C2 and C3 and not
populate C1, C4,C5 and C6.

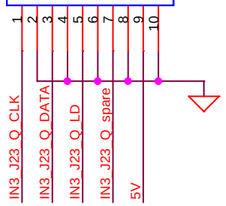


Either L1 or L2 is
installed. Not both.

Connections for J6
follow the same pattern
as for J5 only the pins
at the iBob end are shift
up to -38 and 040 for the GNDs
and -29 and -31 = GPIOx-18 and -19
for the control signals

J3 DF11_10DP_2DS_52
On PCB Top

RED

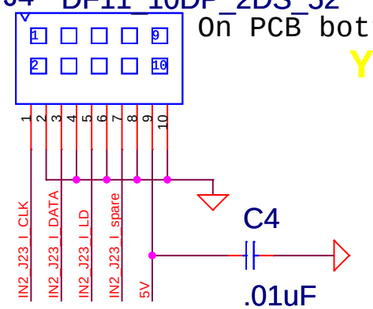


TP1
5V
T POINT R

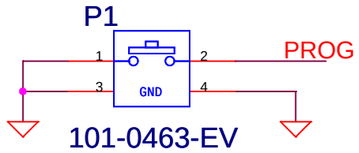
TP2
T POINT R

J4 DF11_10DP_2DS_52
On PCB bottom

YELLOW

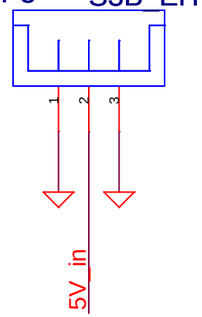


P1



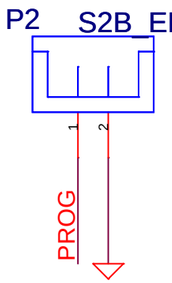
Reset button for
the iBob's FPGA.
button is parallel
to plane of PCB

P3 S3B_EH
On PCB Top



connects to JST EHR-3
and via twisted pair wires :
J6-2 to iBob J19-1 and J19-2
J6-1 and J6-3 to iBob J19-3 and J19-4

P2 S2B_EH
On PCB Top



connects to JST EHR-2
and via twisted pair wires to
2 pin socket housing on 0.1" pitch
J7-1 to iBob J1-1 and
J7-2 to iBob J1-2.

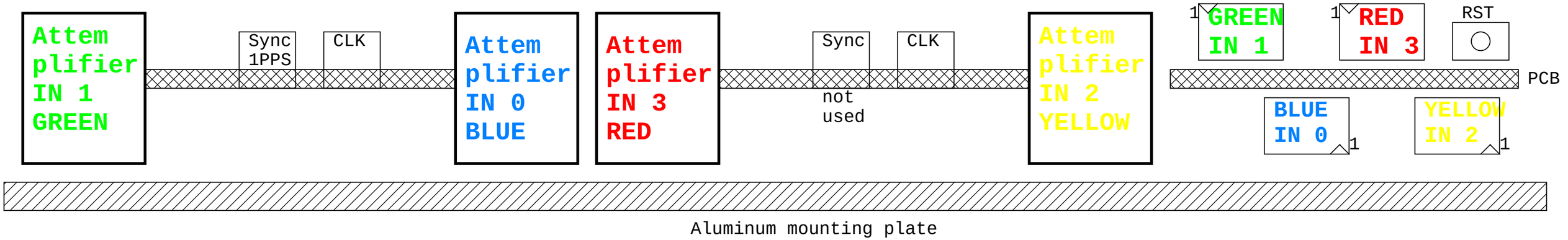
C:\ata\correlator\production\iBob\Schematics\attemplifier_iface.opj

Title: interface board for 4 way attemplifier control alternative

Size: Custom | Document Number: attemplifier _iface: schmatic1: schematics 2 | Rev: 1.0

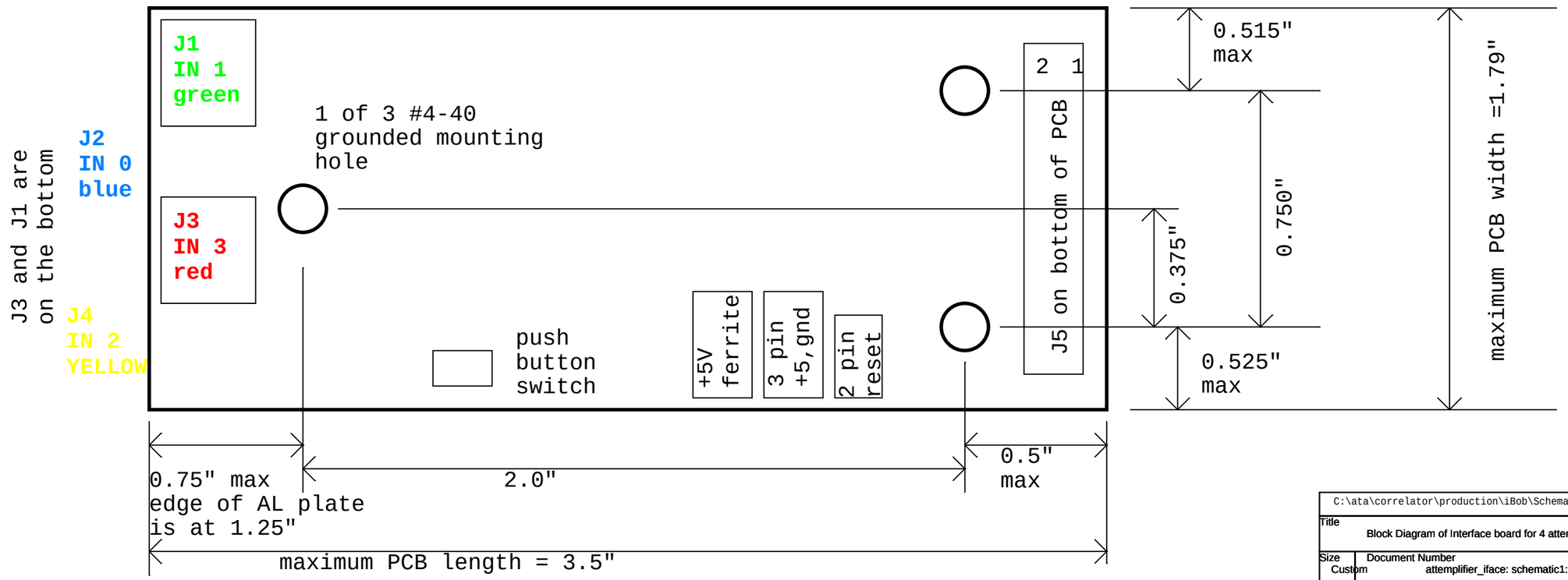
Date: Monday, April 07, 2008 | Sheet 1 of 1

Edge on view from the back of the iBob + iADC chassis



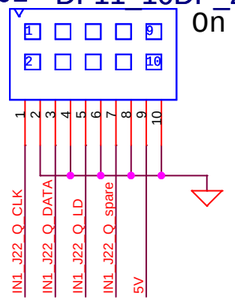
NOT TO SCALE

PCB will rest on 4 #4-40 0.25" tall swage standoffs. P/N is TBD. And be held down with #4 5/8" screw. OD of standoffs is 0.25"



C:\ata\correlator\production\iBob\Schematics\attemplifier_iface.opj		
Title: Block Diagram of Interface board for 4 attemplifiers		
Size: Custom	Document Number: attemplifier_iface: schematic1: Block Diagram 3	Rev: 1.0
Date: Thursday, April 10, 2008	Sheet 1 of 1	

J1 DF11_10DP_2DS_52
On PCB Top

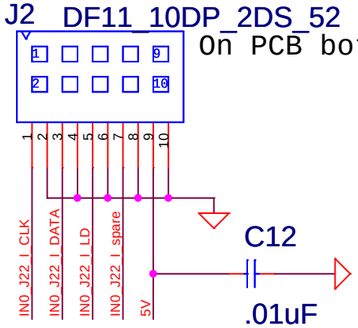


GREEN

connects to HiRose DF11-10DS-2C,
and via twisted pair wires to
the electrical feed thrus on the
attemplifier modules.

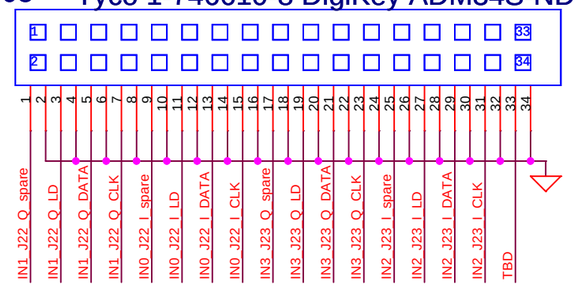
J2 DF11_10DP_2DS_52
On PCB bottom

BLUE



pin mapping from J5 to J1..J4 is TBD and will be whatever is easiest to route on the PCB.

J5 Tyco 1-746610-8 DigiKey ADM34S-ND

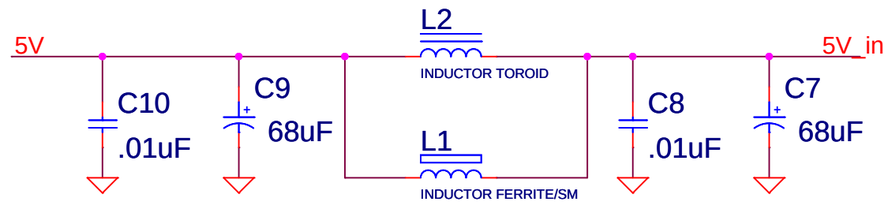


GREEN BLUE RED YELLOW

On PCB bottom
this part is soldered to interface PCB
and ribbon cable is crimped directly
to it.

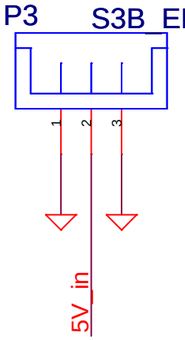
ribbon cable has 1 90 degreen bend,
routes under the iBob PCB and then
wraps around and mates to iBob J9.
iBob J9 pin 1 to inteface board J5 pin 1
all even numbered pins are GND.
if the 34 pin version is too big or can't
be routed we'll revert to 12x2 version
Tyco 2-746610-3 DigiKey ADM24S-ND
and all "spare" signals will be removed.

The plan is to installed C2 and C3 and not
populate C1, C4,C5 and C6.



Either L1 or L2 is
installed. Not both.

P3 S3B_EH

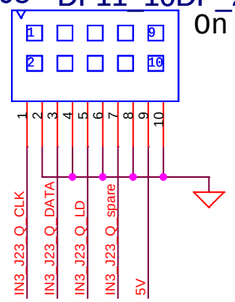


On PCB Top

connects to JST EHR-3
and via twisted pair wires :
J6-2 to iBob J19-1 and J19-2
J6-1 and J6-3 to iBob J19-3 and J19-4

J3 DF11_10DP_2DS_52
On PCB Top

RED

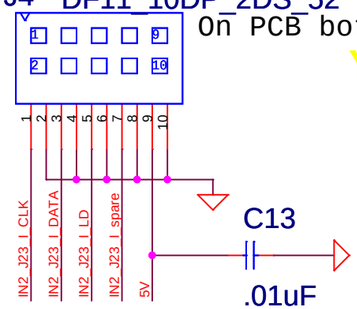


TP1
5V
T POINT R

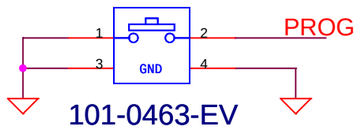
TP2
T POINT R

J4 DF11_10DP_2DS_52
On PCB bottom

YELLOW

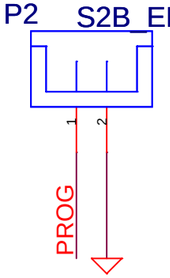


P1



Reset button for
the iBob's FPGA.
button is parallel
to plane of PCB

P2 S2B_EH



On PCB Top

connects to JST EHR-2
and via twisted pair wires to
2 pin socket housing on 0.1" pitch
J7-1 to iBob J1-1 and
J7-2 to iBob J1-2.

C:\ata\correlator\production\iBob\Schematics\attemplifier_iface.opj		
Title: interface board for 4-way attemplifier control		
Size: Custom	Document Number: attemplifier_iface: schematic1: schematics 3	Rev: 1.0
Date: Thursday, April 10, 2008	Sheet 1 of 1	