1.3 piSmasher alpha design 00003 10/05/2015 BEH

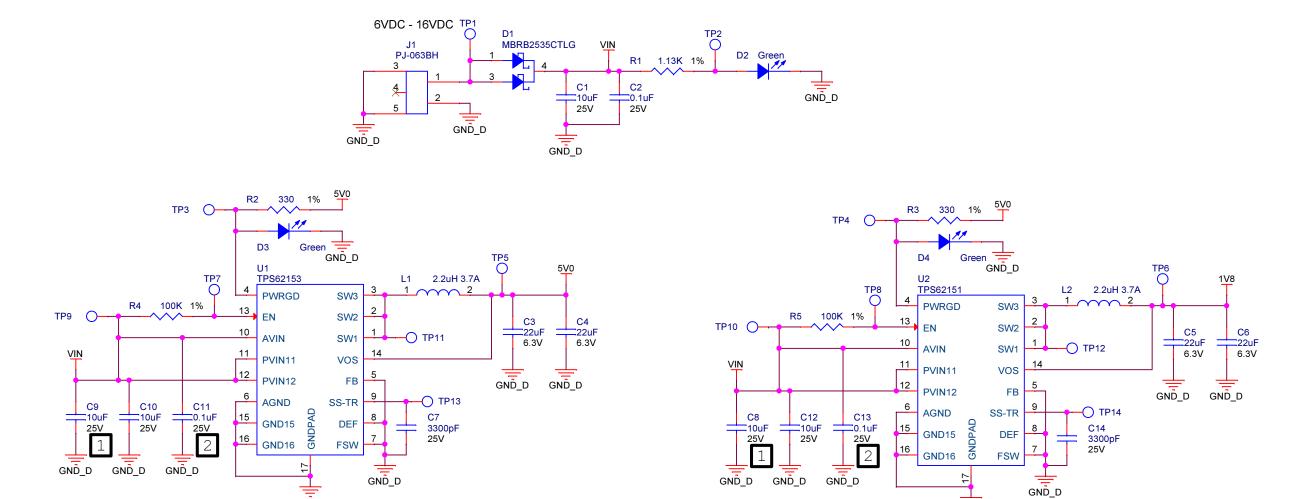
piSmasher SBC

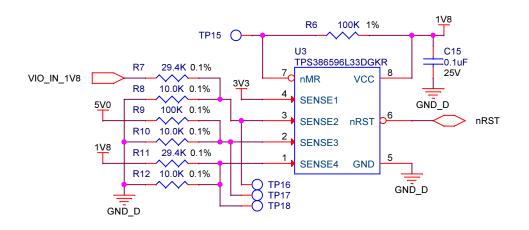
Power Supplies

В

15081802-01

1.3



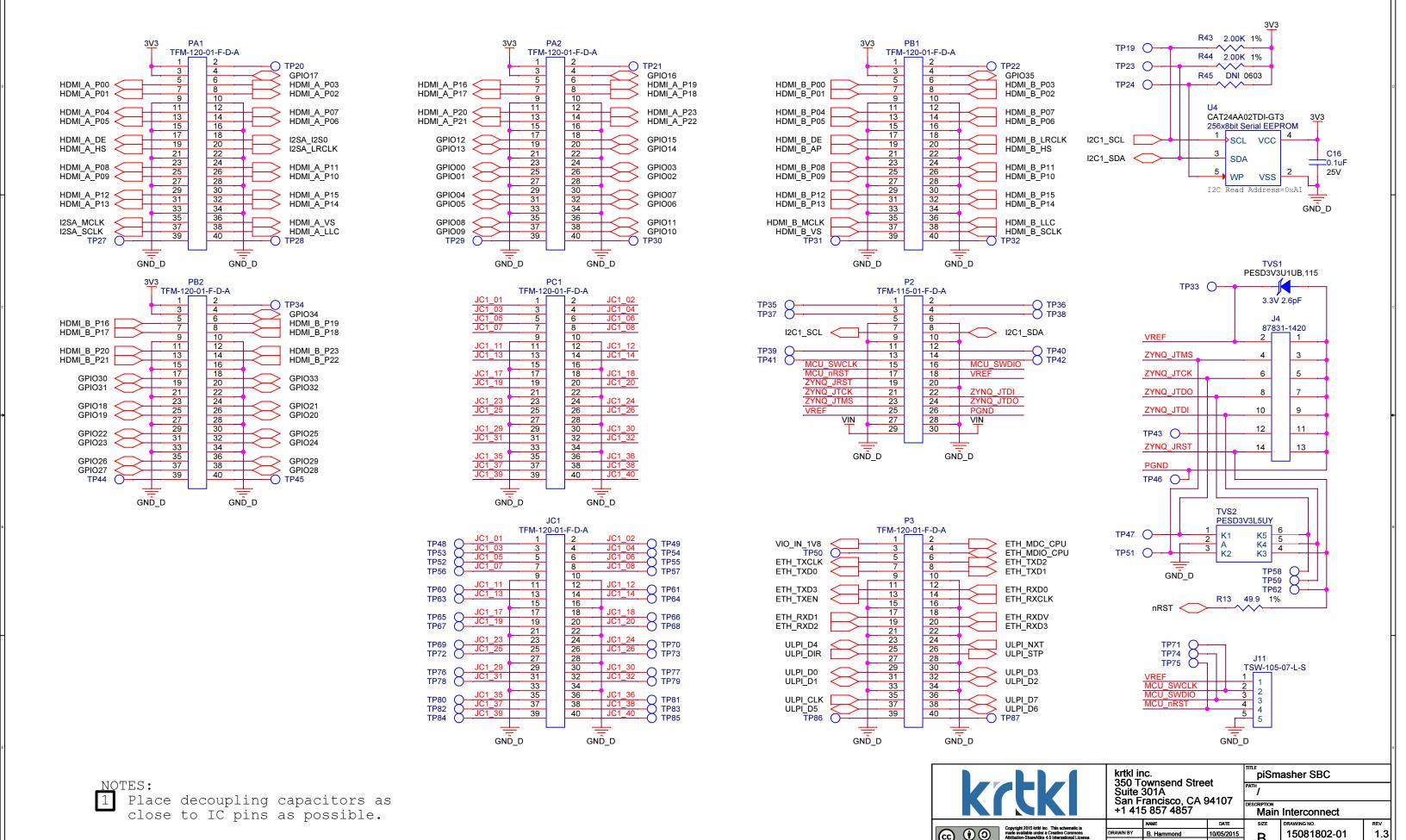


Place decoupling capacitors as close to IC pins as possible.

GND\_D

krtkl	krtkl inc. 350 Townsend Street Suite 301A San Francisco, CA 94107 +1 415 857 4857		
Copyright 2015 krtkl inc. This schematic is		NAME	DATE
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GND\_D



DRAWN BY B. Hammond

HECKED BY J. Weatherbee

PPROVED BY R. Cousins

10/05/2015

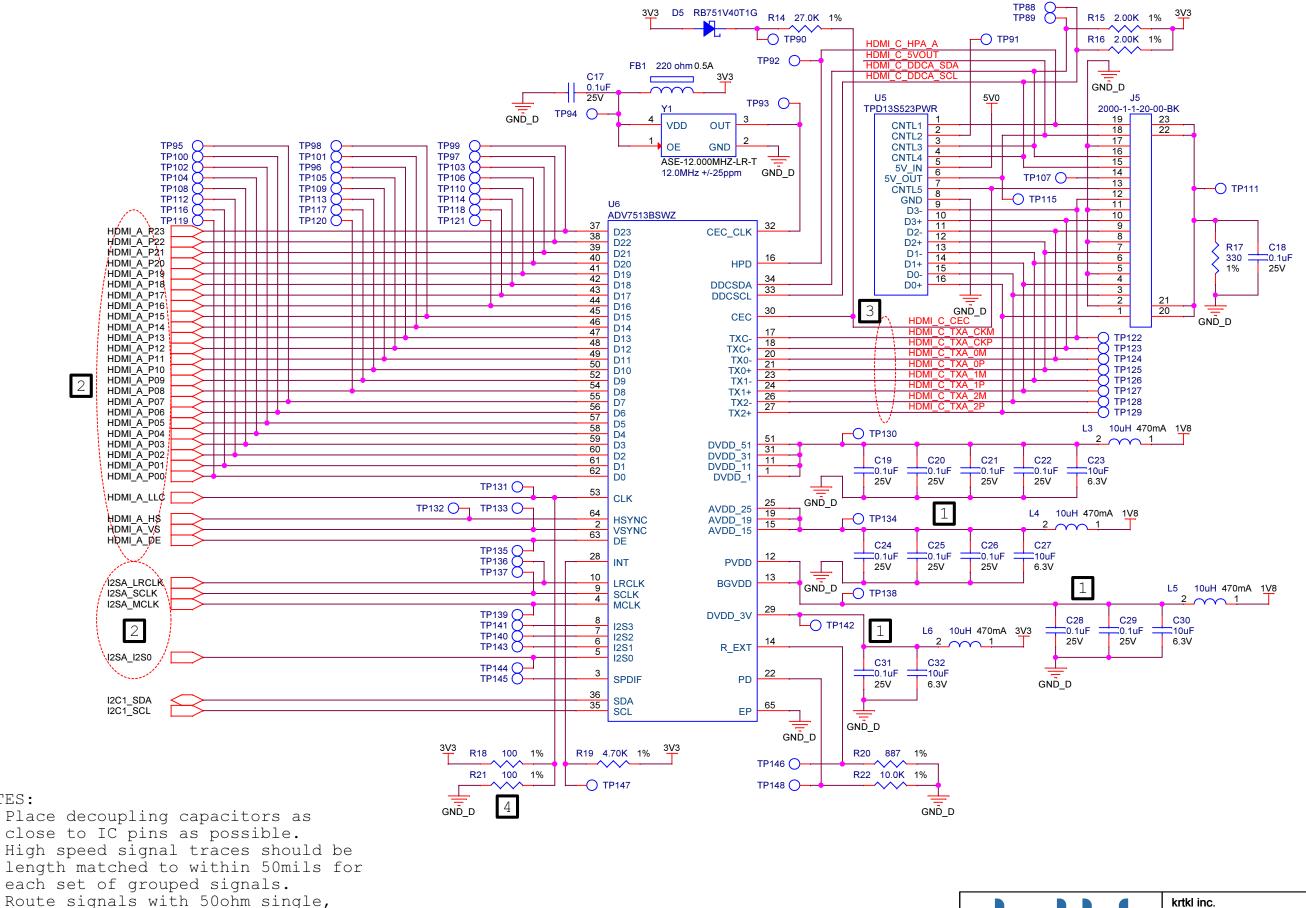
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SHEET 2 OF 7



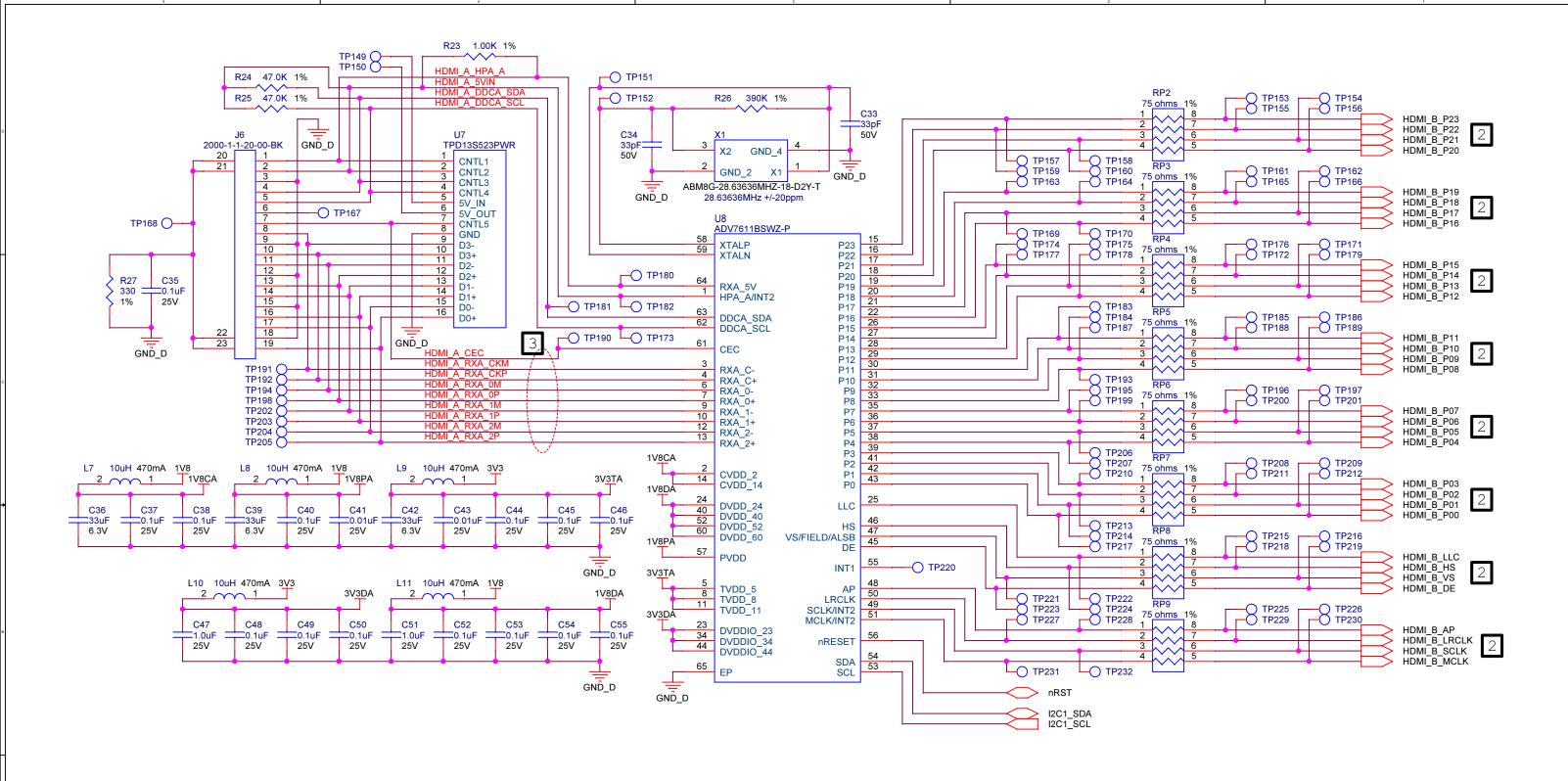
100ohm differential impedance.

Place resistors as close to IC

pin as possible with minimum

trace stubs.

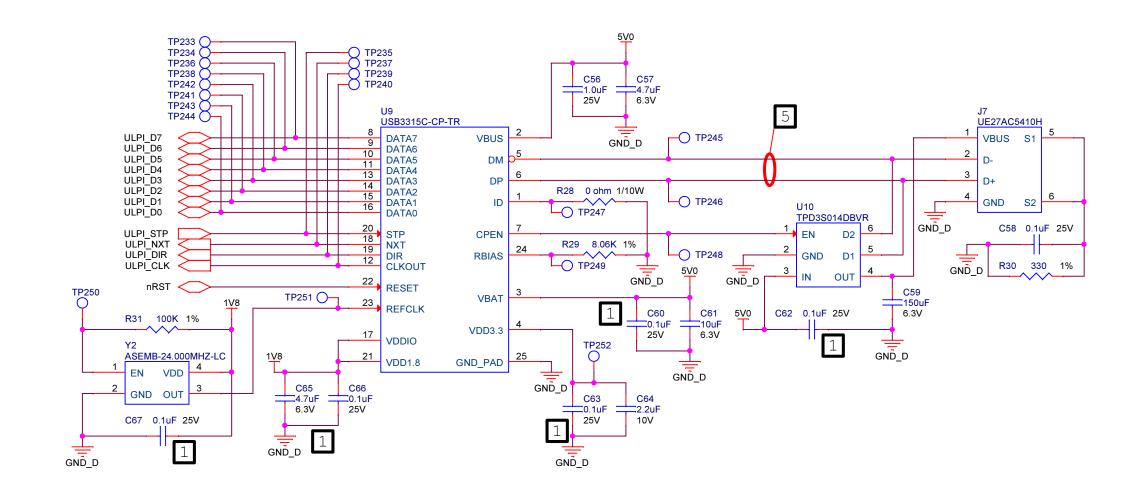
krtkl inc. 350 Townsend Street Suite 301A piSmasher SBC San Francisco, CA 94107 scription HDMI Transmitter +1 415 857 4857 1.3 15081802-01 DRAWN BY B. Hammond 10/05/2015 В CHECKED BY J. Weatherbee 10/05/2015 SHEET 3 OF 7



- 1 Place decoupling capacitors as
- close to IC pins as possible.

  High speed signal traces should be length matched to within 50mils for
- each set of grouped signals.
  Route signals with 50ohm single,
  100ohm differential impedance.





NOTES:
1 Place Place decoupling capacitors as close to IC pins as possible. Route indicated signals as 90 ohm differential pairs.

	K	krtkl inc. 350 Townsend Street Suite 301A San Francisco, CA 94107 +1 415 857 4857			
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		DRAWN BY	B. Hammond	10/05/2015	ĺ
		CHECKED BY	J. Weatherbee	10/05/2015	ĺ
		APPROVED BY	R. Cousins	10/05/2015	L

piSmasher SBC

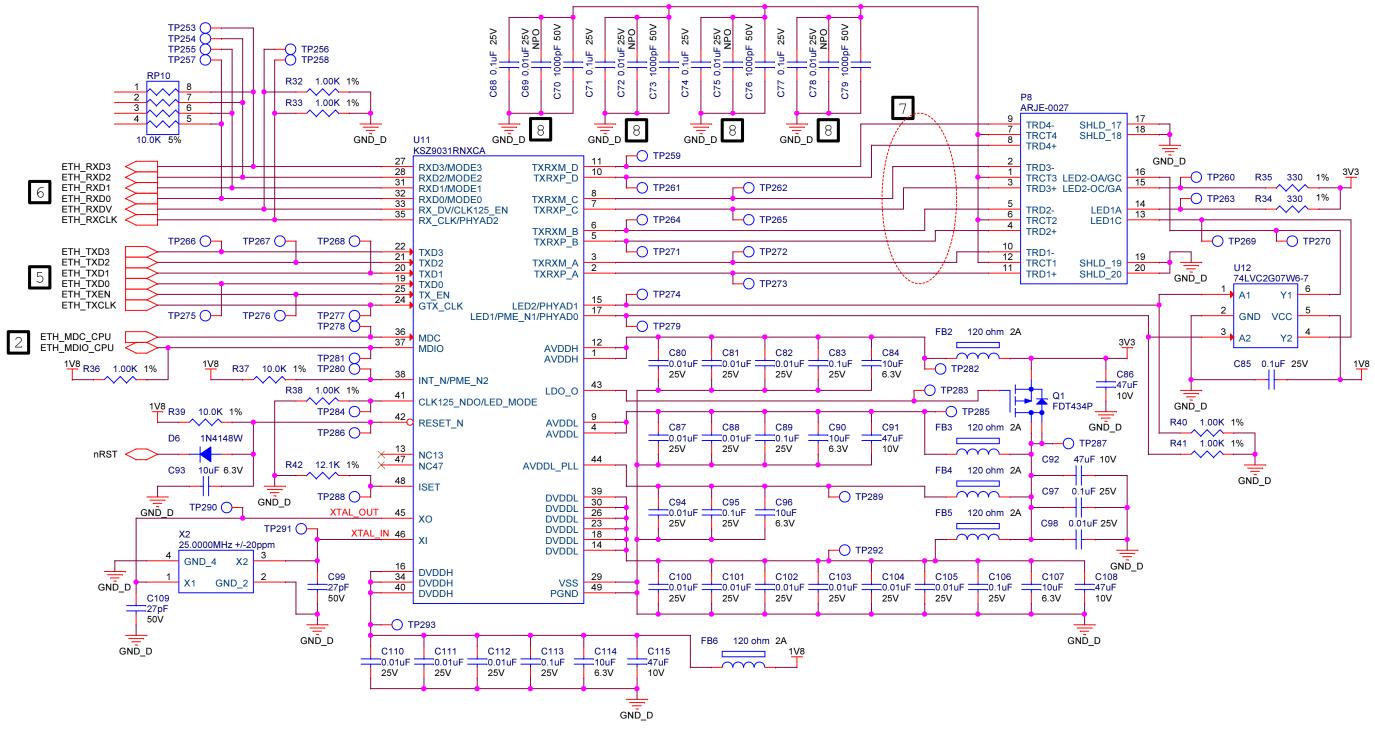
ULPI USB PHY

В

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SHEET 5 OF 7

1.3



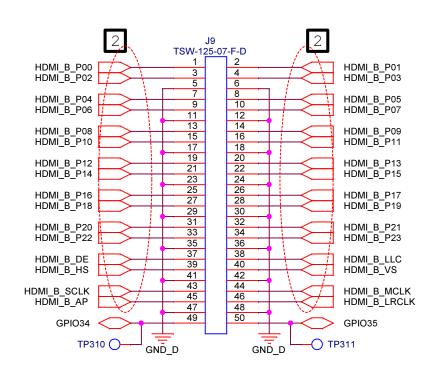
- 1 Place decoupling capacitors as
- close to IC pins as possible.

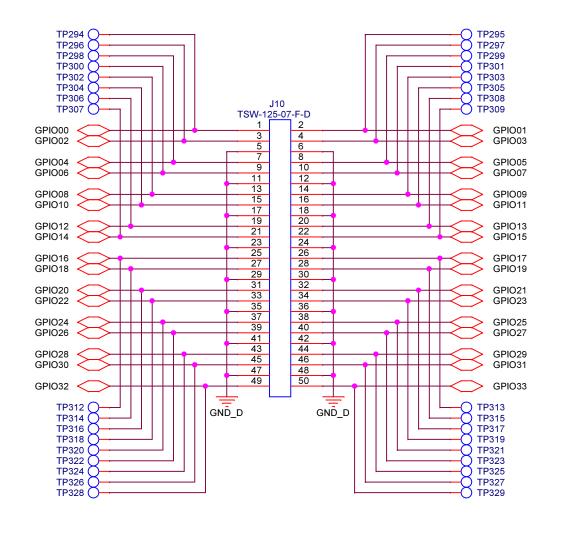
  High speed signal traces should be length matched to within 50mils for each set of grouped signals.
- U11 RGMII inputs ETH\_TXxx: match trace lengths from connector P3 to U11 such that data bit to data bit skew is between -500ps and +500ps, and data bits to clock skew is between 1.0ns and 2.6ns.
- 6 U11 RGMII outputs ETH\_RXxx: match trace lengths from connector P3 to U11 such that data bit to data bit skew and data bits to clock skew is between -500ps and +500ps.
- Route signal pairs with 50ohm single, 100ohm differential impedance.
- Place each set of three decoupling capacitors as close to Ethernet connector pins as possible.



krtkl inc. 350 Townsend Street Suite 301A San Francisco, CA 94107 +1 415 857 4857			piSmasher SBC  PATH / DESCRIPTION Ethernet Transceiver		
	NAME	DATE	SIZE	DRAWING NO.	
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CHECKED BY	J. Weatherbee	10/05/2015	В		

1.3





High speed signal traces should be length matched to within 50mils for each set of grouped signals.

