

Controller Module Walnut

Notes:
See PRD 050-0061 for this PCA:
PM2510-1 Direct Replacement Manager
(New processor)

See also design and layout
notes on throughout schematic.

Reworks:

Revision History

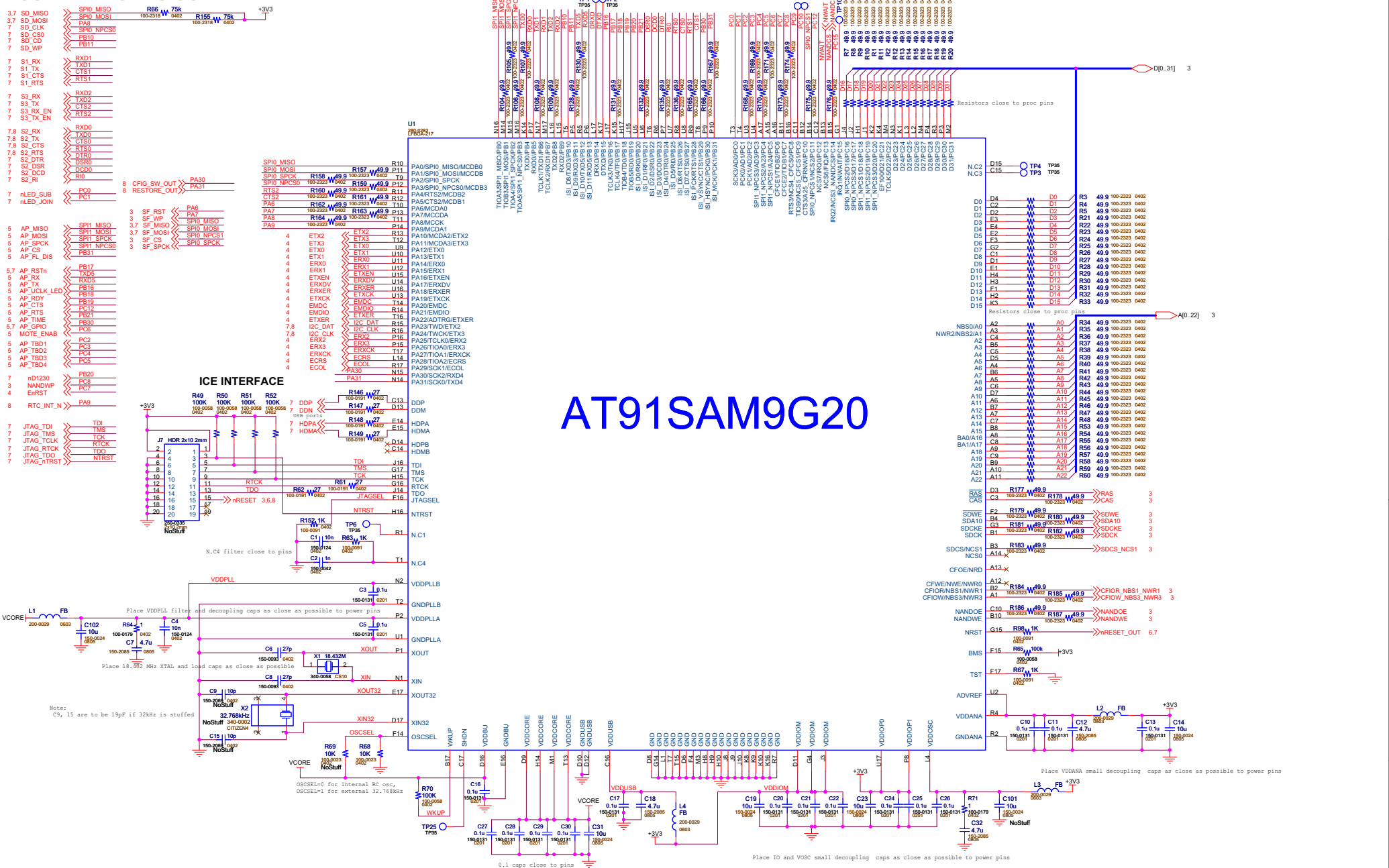
Rev	Description	ECO	Author
01	EOL redesign for Oak and Cedar	676	R Peregrino
02	Changes and fixes resulting from board bring up	774	R Peregrino
03	Production version, Rev 2 PCB	775	R Peregrino
04	Adjust terminations and PS filtering	798	R Peregrino
05	Fix for issue HW-98 power supply sequencing vs. latch up	862	R Peregrino
06	Fix footprint mismatch	874	R Peregrino

PCB Fab: 600-0160
PCA BOM: 700-0160
PCA ASSY: 705-0160

Title Page / Revision History			
Title PCA SCHEMATIC, CONTROLLER MODULE, WALNUT			
Size B	Document Number 710-0160		Rev 06
Date:	Tuesday, December 15, 2009	Sheet 1 of 8	

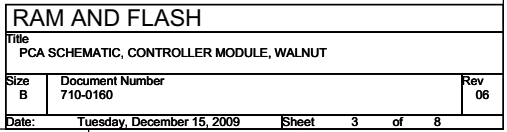
Confidentiality
This document is provided under a Non-Disclosure Agreement for the purpose of enabling intrinsic safety and international radio certification of Dust Networks™ products. Distribution of this document for any other purpose is prohibited. Distribution of this document shall be completed in a manner such that the material content of this document shall remain confidential by all parties.

DUST NETWORKS CONFIDENTIAL

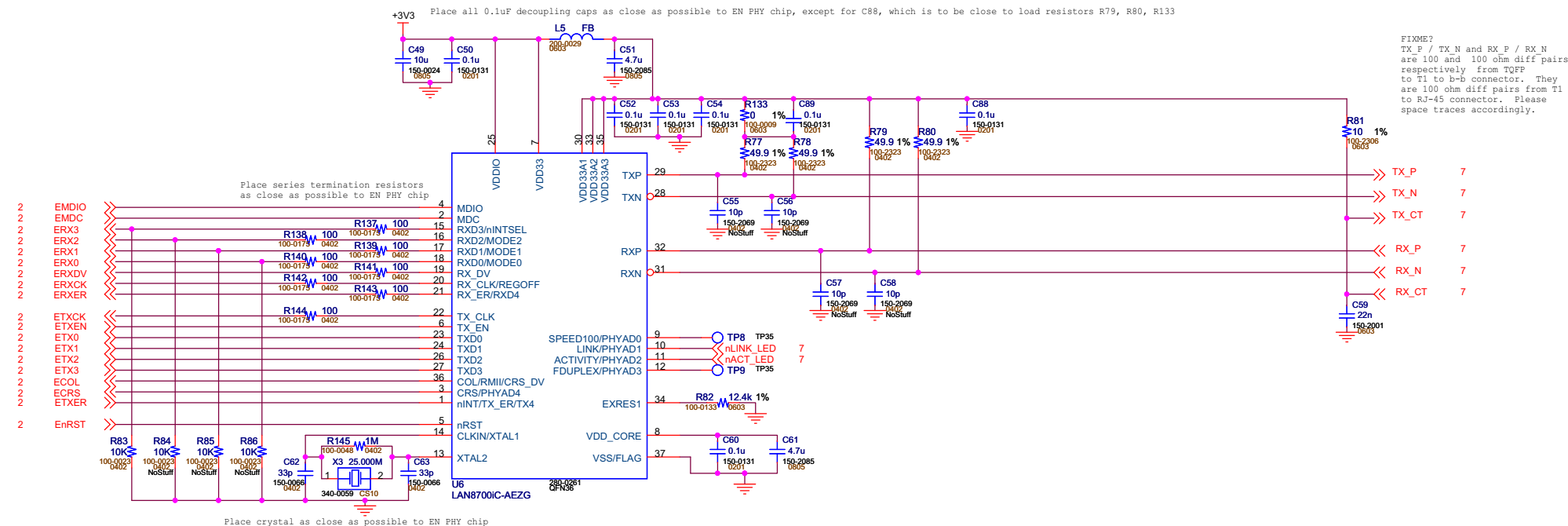


Confidentiality
This document is provided under a Non-Disclosure Agreement for the purpose of enabling intrinsic safety and international radio certification of Dust Networks™ products. Distribution of this document for any other purpose is prohibited. Distribution of this document shall be completed in a manner such that the material content of this document shall remain confidential by all parties.

SDRAM

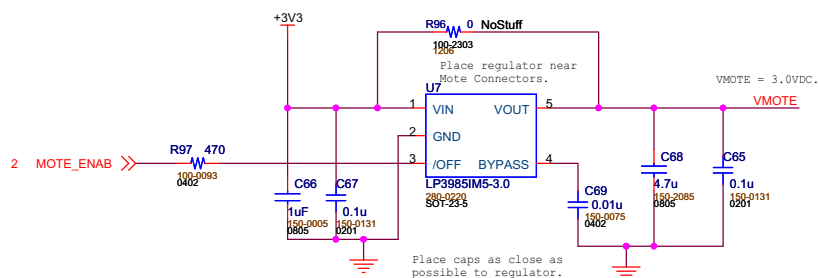
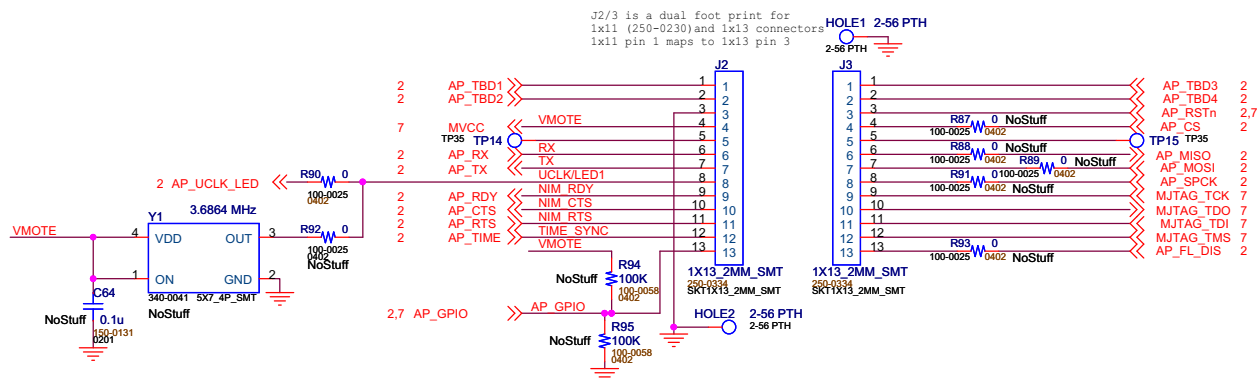


Confidentiality
This document is provided under a Non-Disclosure Agreement for the purpose of enabling intrinsic safety and international radio certification of Dust Networks™ products. Distribution of this document for any other purpose is prohibited. Distribution of this document shall be completed in a manner such that the material content of this document shall remain confidential by all parties.



10/100 Base-T PHY		
Title PCA SCHEMATIC, CONTROLLER MODULE, WALNUT		
Size B	Document Number 710-0160	Rev 06
Date:	Tuesday, December 15, 2009	Sheet 4 of 8

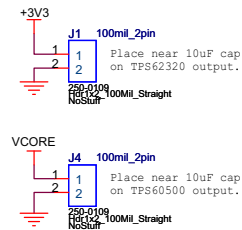
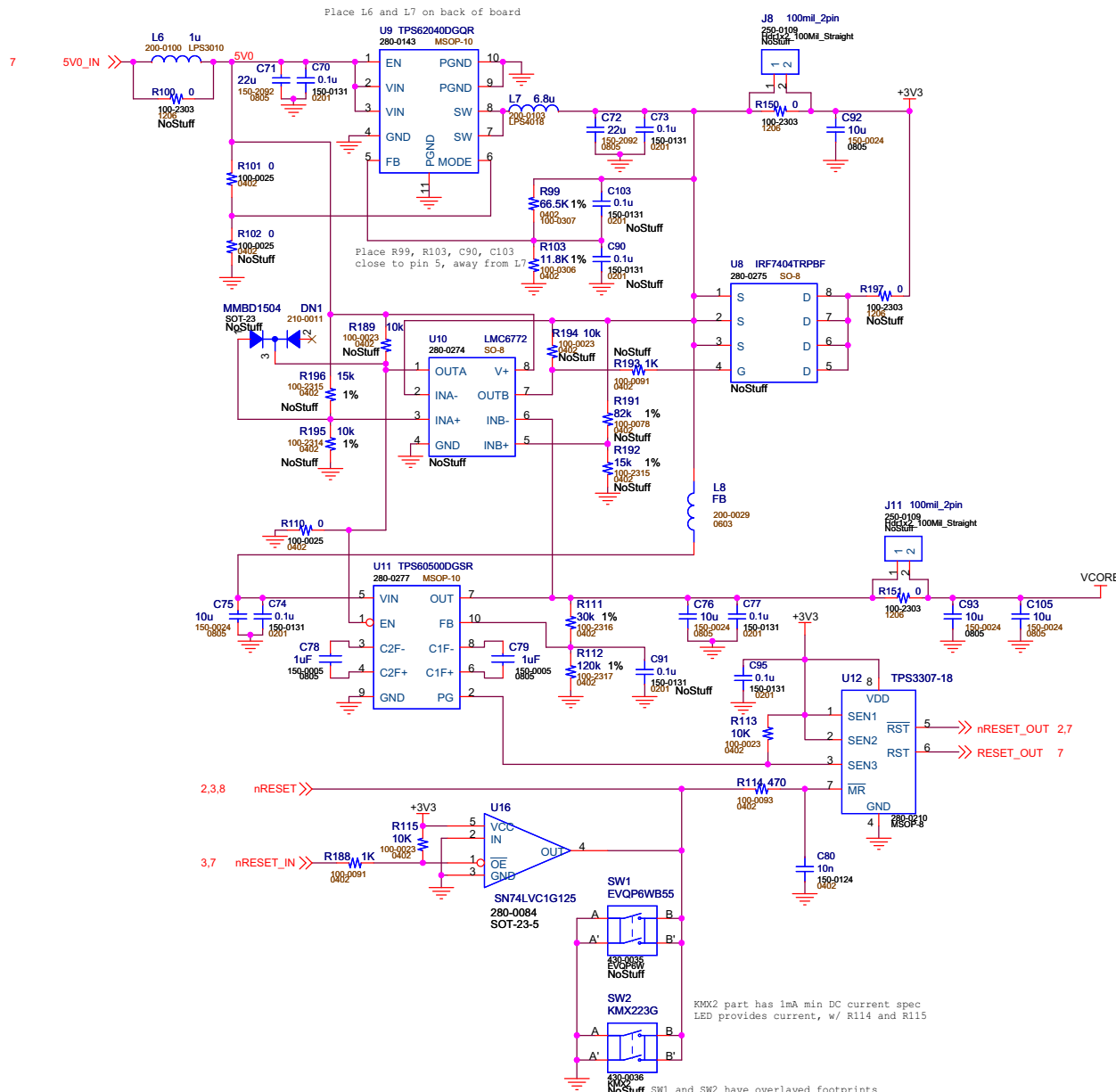
Confidentiality
This document is provided under a Non-Disclosure Agreement for the purpose of enabling intrinsic safety and international radio certification of Dust Networks™ products. Distribution of this document for any other purpose is prohibited. Distribution of this document shall be completed in a manner such that the material content of this document shall remain confidential by all parties.



MOTE INTERFACE			
Title PCA SCHEMATIC, CONTROLLER MODULE, WALNUT			
Size B	Document Number 710-0160	Rev 06	
Date:	Tuesday, December 15, 2009	Sheet 5	of 8

Confidentiality

This document is provided under a Non-Disclosure Agreement for the purpose of enabling intrinsic safety and international radio certification of Dust Networks™ products. Distribution of this document for any other purpose is prohibited. Distribution of this document shall be completed in a manner such that the material content of this document shall remain confidential by all parties.

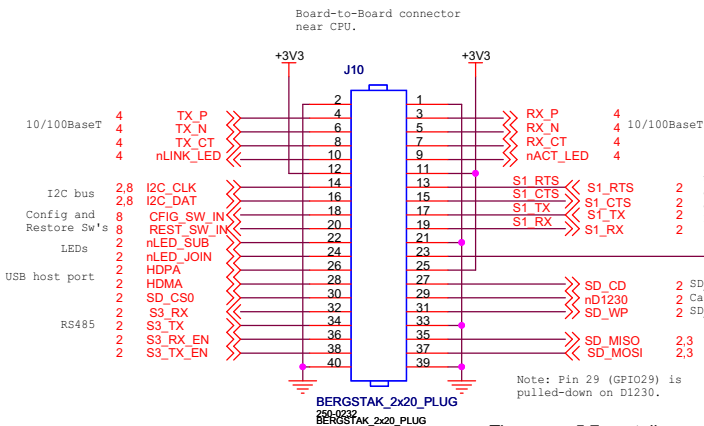
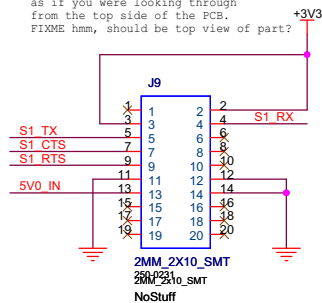


DC-DC Converters			
Title PCA SCHEMATIC, CONTROLLER MODULE, WALNUT			
Size B	Document Number 710-0160		Rev 05
Date:	Tuesday, December 15, 2009	Sheet 6	of 8

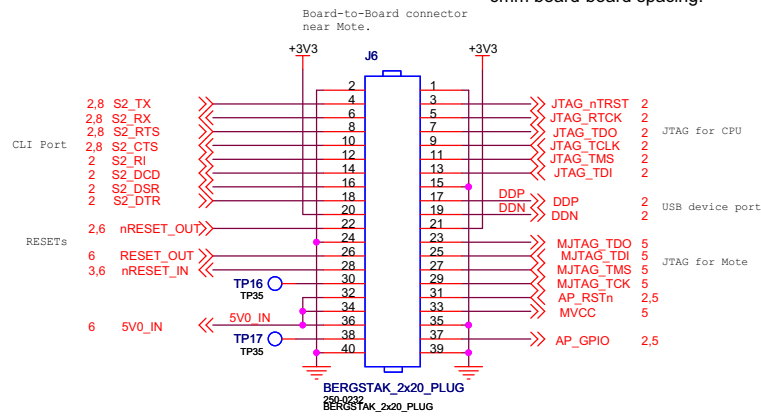
Confidentiality

This document is provided under a Non-Disclosure Agreement for the purpose of enabling intrinsic safety and international radio certification of Dust Networks™ products. Distribution of this document for any other purpose is prohibited. Distribution of this document shall be completed in a manner such that the material content of this document shall remain confidential by all parties.

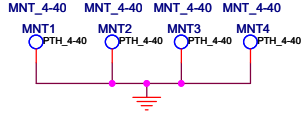
This is the Alba 20-pin socket on the bottom of the PCB. Pin 1 on this sheet is oriented as if you were looking through from the top side of the PCB. FIXME hmm, should be top view of part?



These are 5.7mm tall connectors that mates with a connector on the motherboard to achieve a 6mm board-board spacing.



Mounting Hole is plated-thru, 0.125" diameter hole with 0.250" pads on both sides.

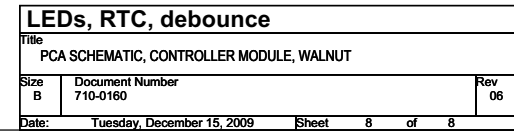


Non-plated thru Tooling Holes, 0.125" diameter. Locate per Placement Drawing.

Board to Board Connectors			
Title			
PCA SCHEMATIC, CONTROLLER MODULE, WALNUT			
Size	Document Number	Rev	
B	710-0160	06	
Date:	Tuesday, December 15, 2009	Sheet	7 of 8

Confidentiality

This document is provided under a Non-Disclosure Agreement for the purpose of enabling intrinsic safety and international radio certification of Dust Networks™ products. Distribution of this document for any other purpose is prohibited. Distribution of this document shall be completed in a manner such that the material content of this document shall remain confidential by all parties.



This document is provided under a Non-Disclosure Agreement for the purpose of enabling intrinsic safety and international radio certification of Dust Networks™ products. Distribution of this document for any other purpose is prohibited. Distribution of this document shall be completed in a manner such that the material content of this document shall remain confidential by all parties.