

01. COVER



CONTENT

PAGE NO.	SCHEMATIC PAGE
1	Cover
2	Block Diagram
3	DART-SD800
4	LVDS, HDMI
5	USB, USB-ETHERNET BRIDGE
6	LEDS, BUTTONS, BOOT SELECT
7	SD CARD, AUDIO, CAMERA
8	POWER
9	

Disclaimer:

SchematicS are for reference only.
 Variscite LTD provides no warranty for the use of
 these schematics.
 Schematics are subject to change without notice.

VPC1



Revision History

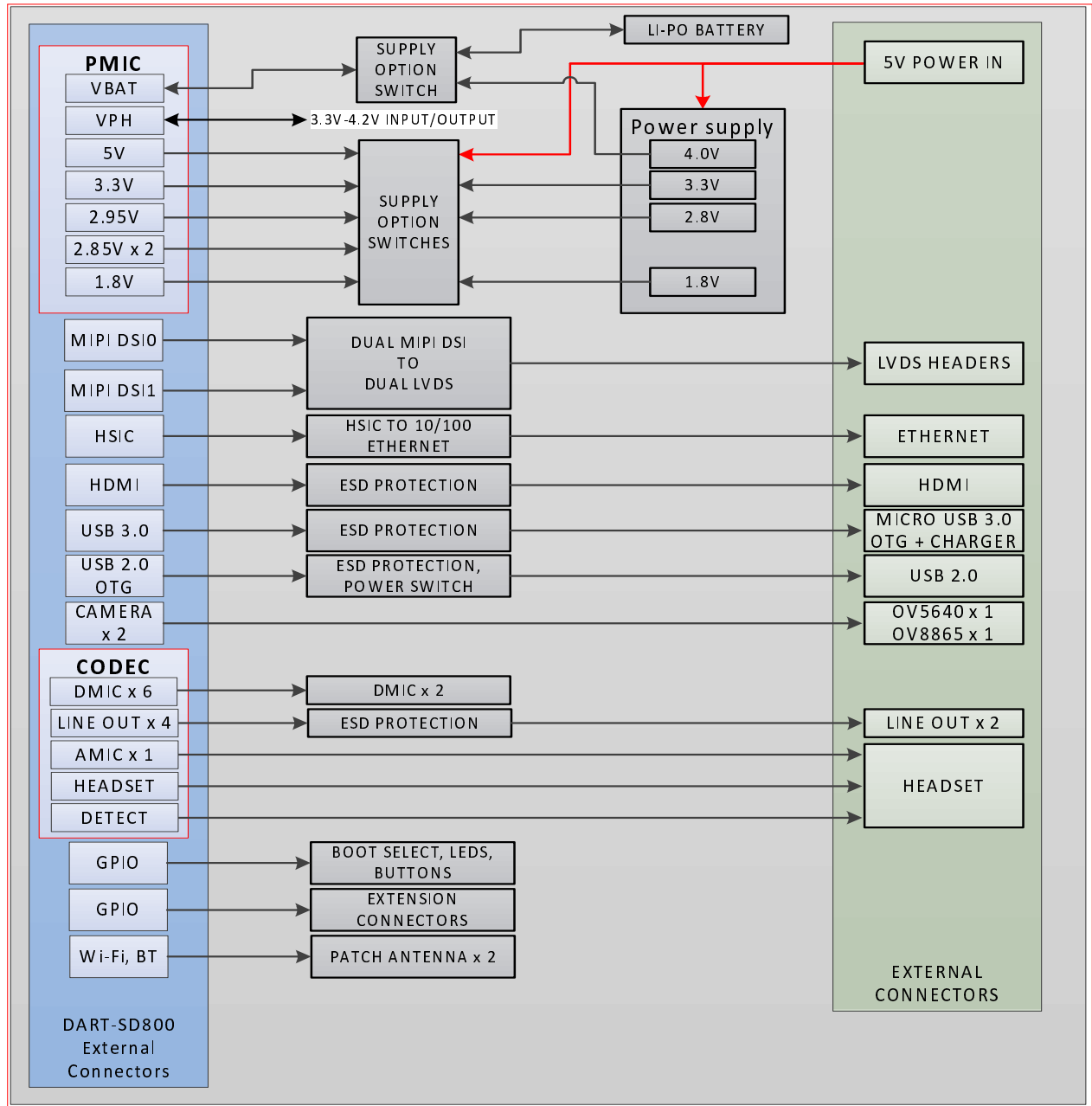
Rev	Initial
Rev 1.0	

Title
 01.Cover

Size A3	Document Number DART-SD800 CustomBoard	Project DART-SD800 CustomBoard	Rev 1.0
-------------------	--	--	-------------------

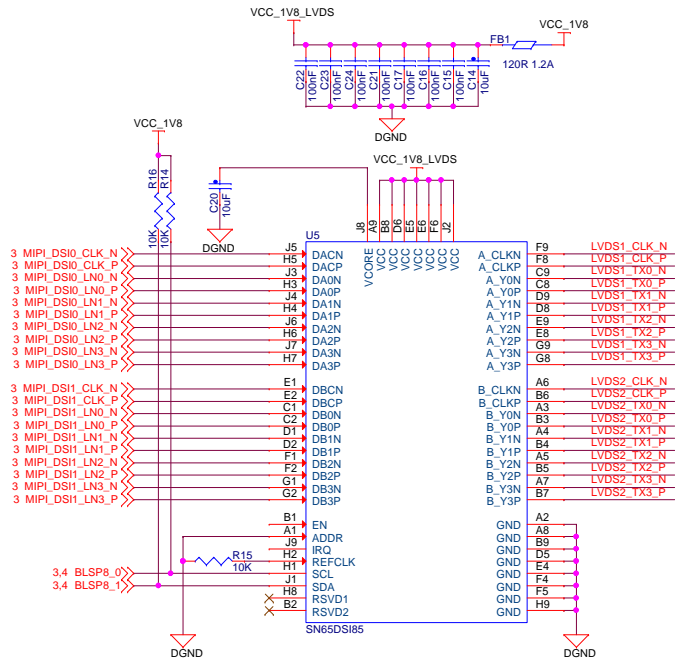
Designer: Leonid S. **Approved By:**
Date: Monday, February 23, 2015 **Sheet** 1 **of** 8

02.BLOCK DIAGRAM



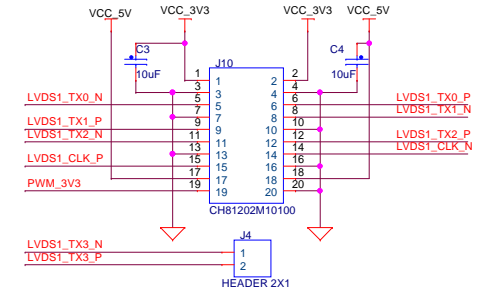
04.LVDS, HDMI

DSI to LVDS bridge

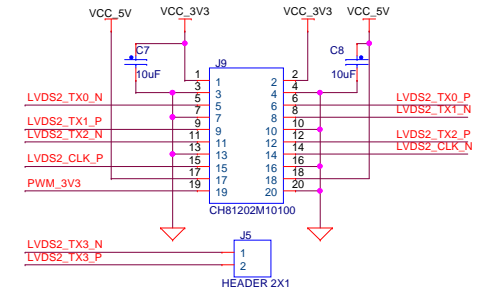


Display

LVDS1

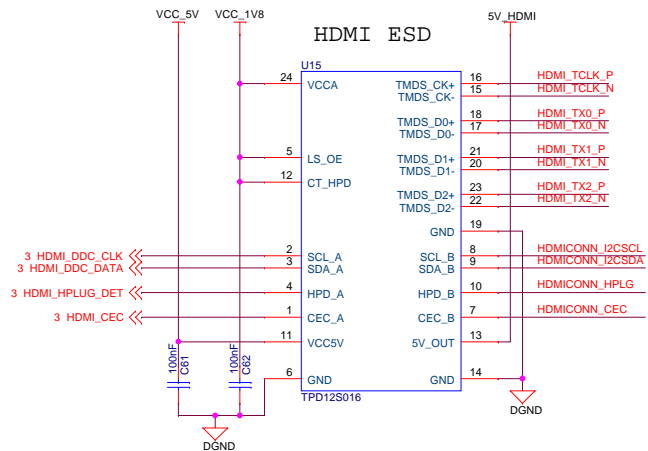


LVDS2

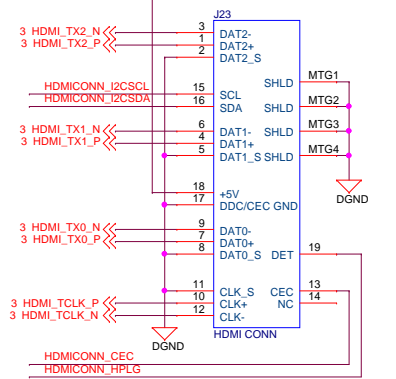


HDMI interface

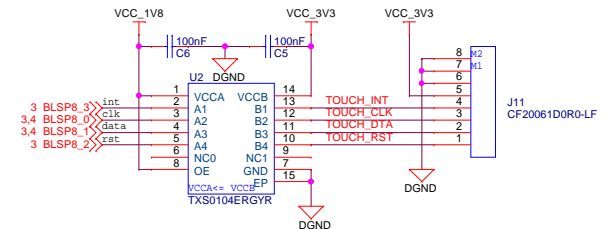
HDMI ESD



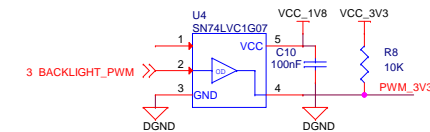
HDMI Connector



TOUCH SCREEN Connector



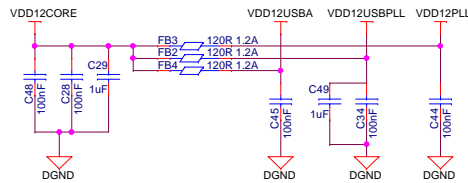
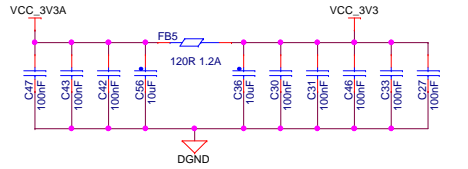
BACKLIGHT Level Shifter



Title 04.LVDS, HDMI			
Size A3	Document Number DART-SD800 CustomBoard	Project DART-SD800 CustomBoard	Rev 1.0
Designer: Leonid S.		Approved By:	
Date: Monday, February 23, 2015		Sheet 4 of 8	

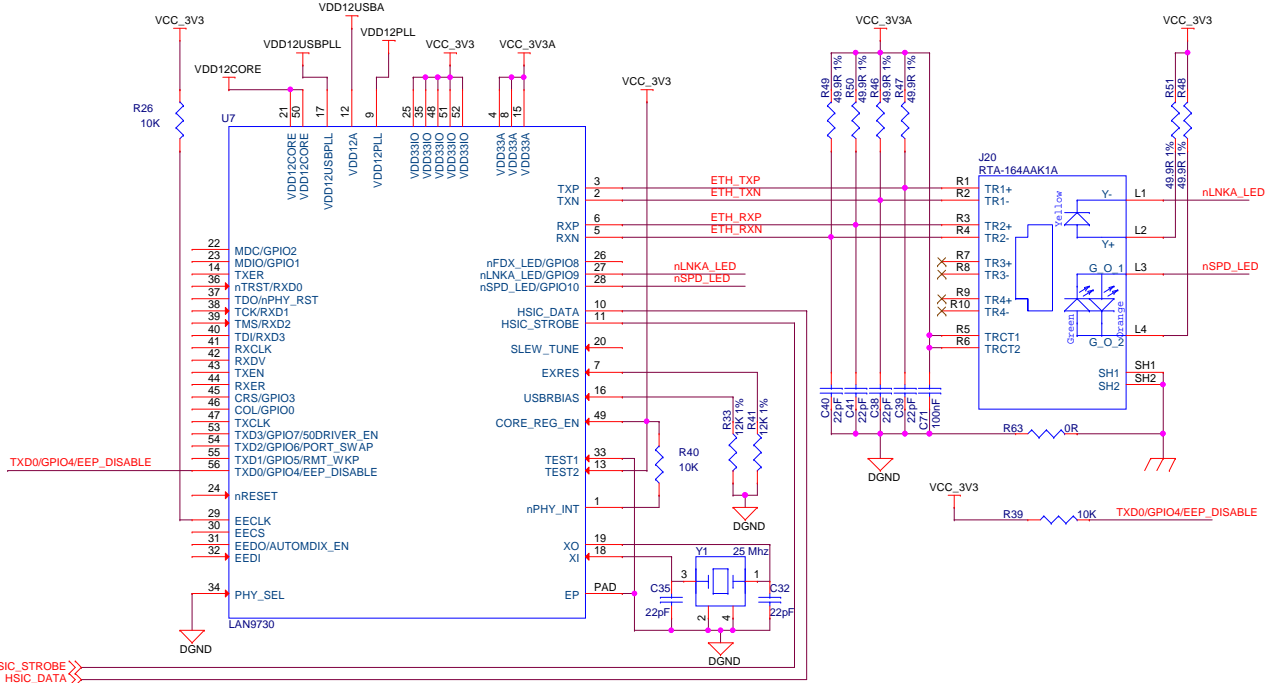
05. USB, USB-ETHERNET BRIDGE

HSIC to ETHERNET Bridge

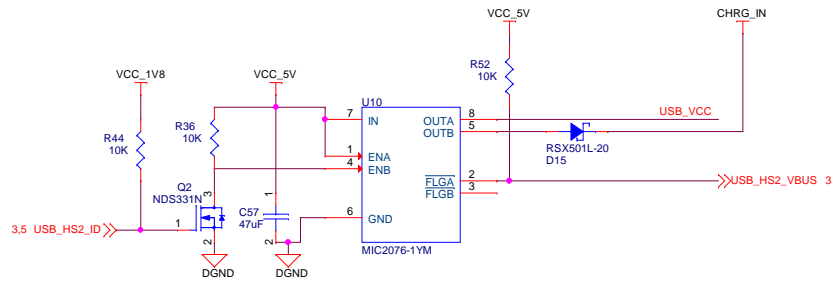


NOTE:
Place the 1uF at pin 50

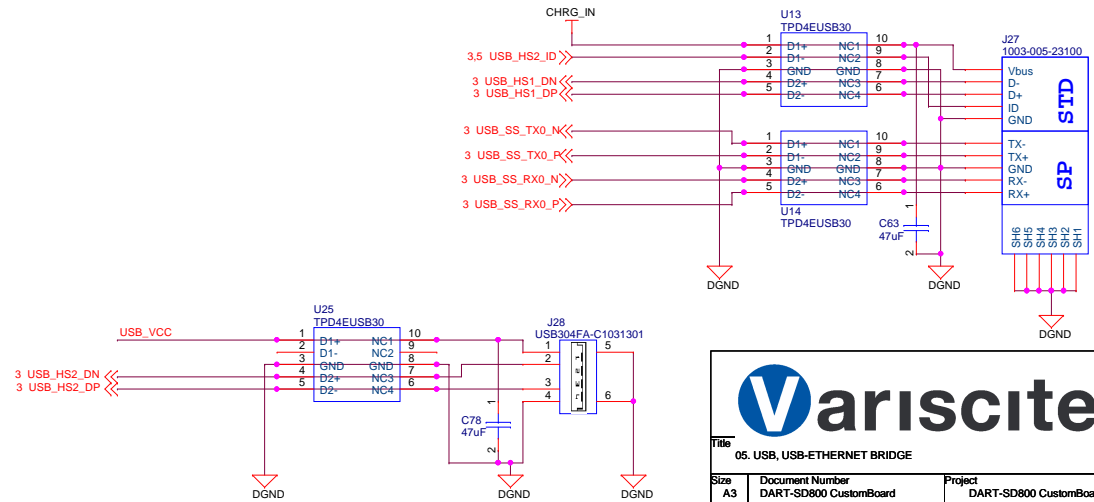
NOTE:
Place the 1uF at pin 17




USB power



USB Connectors

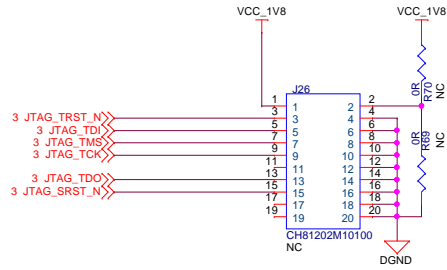




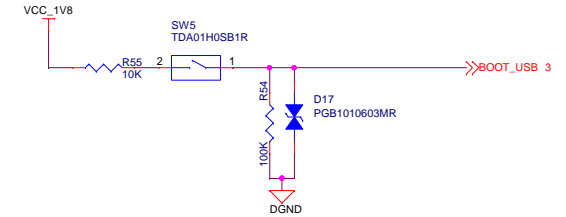
Title 05. USB, USB-ETHERNET BRIDGE			
Size A3	Document Number DART-SD800 CustomBoard	Project DART-SD800 CustomBoard	Rev 1.0
Designer: Leonid S.		Approved By:	
Date: Monday, February 23, 2015		Sheet 5 of 8	

06. LEADS, BUTTONS, BOOT SELECT

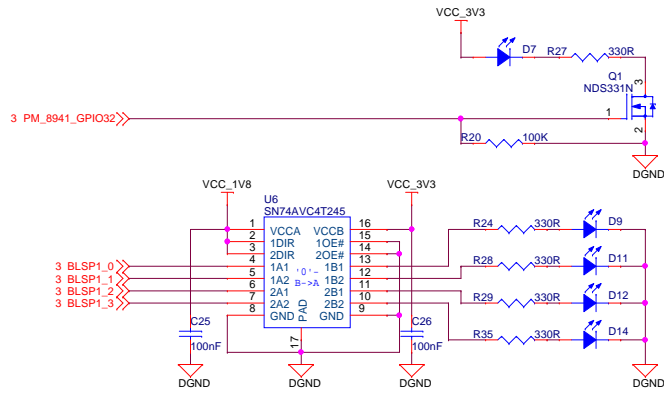
ARM JTAG



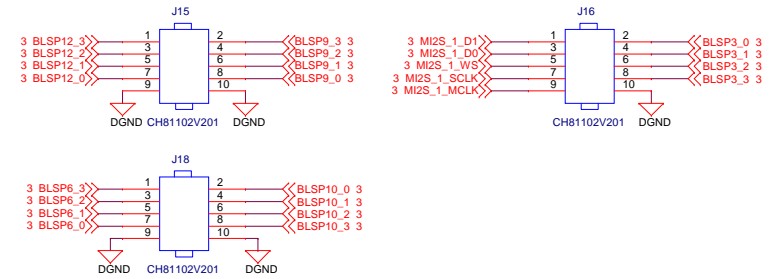
BOOT SELECT Switch (VARISCITE USE ONLY)



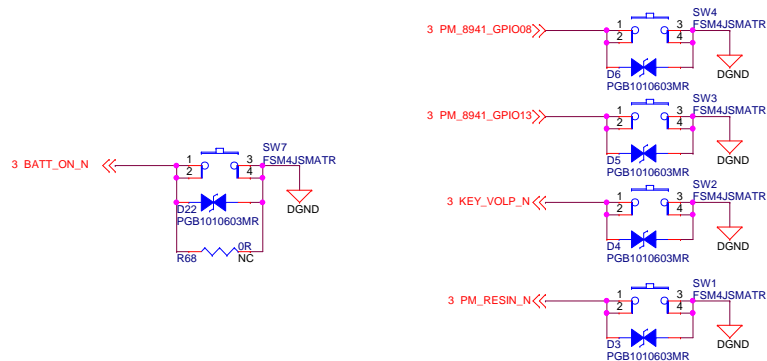
USER LEADS



EXTENSION Connectors

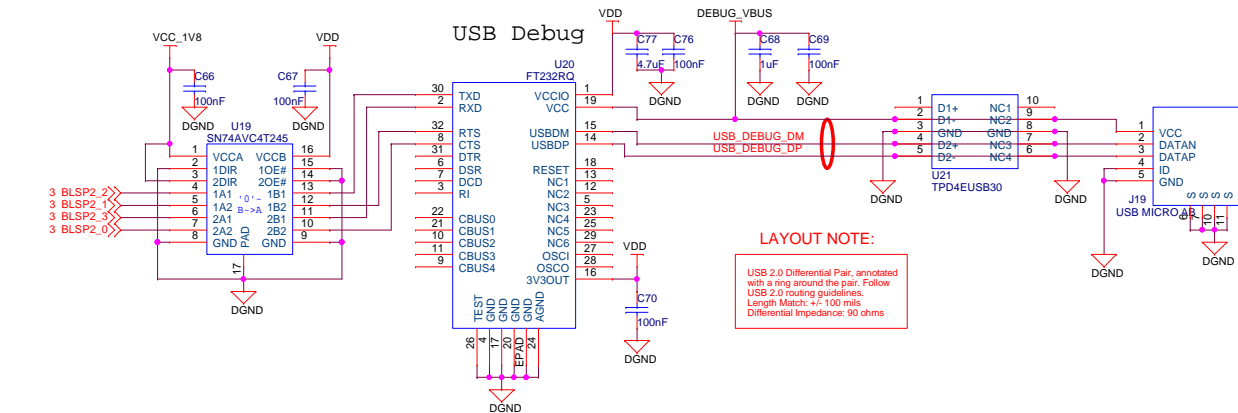
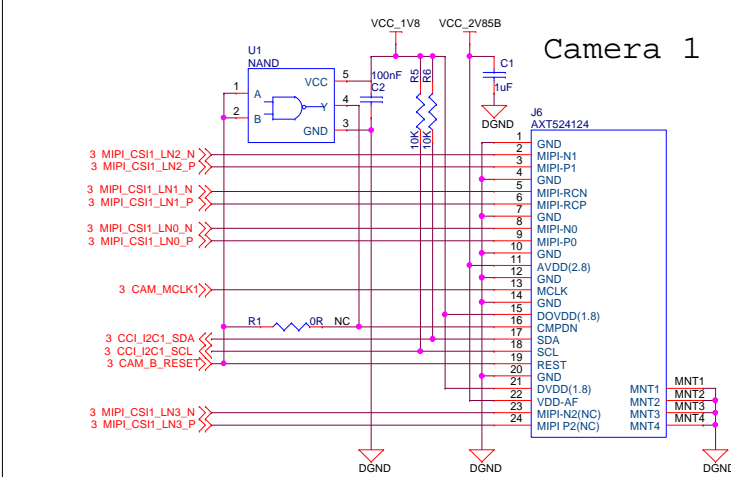
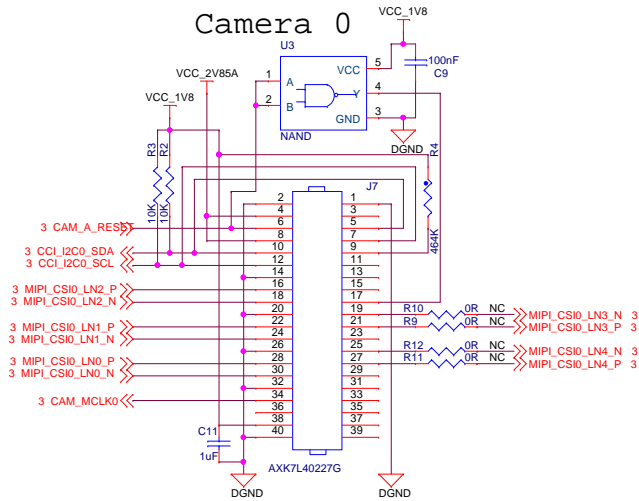
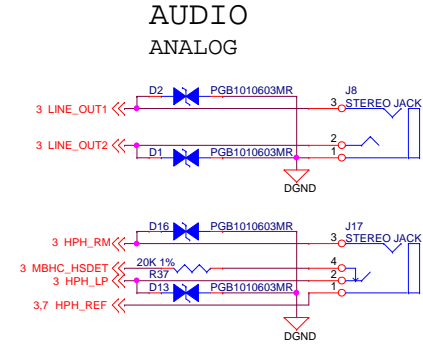
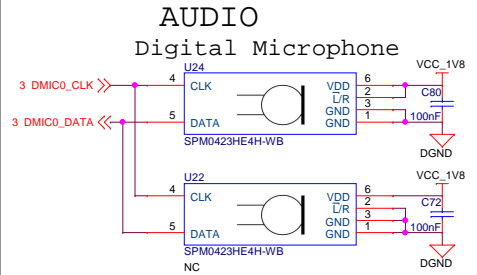
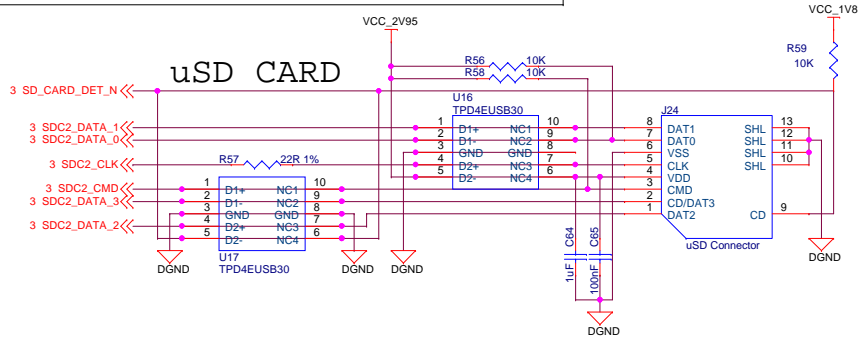


USER BUTTONS



Title 06. LEADS, BUTTONS, BOOT SELECT
Size A3 **Document Number** DART-SD800 CustomBoard **Project** DART-SD800 CustomBoard **Rev** 1.0
Designer Leonid S. **Approved By:**
Date: Monday, February 23, 2015 **Sheet** 6 **of** 8

07. SD CARD, AUDIO, CAMERA

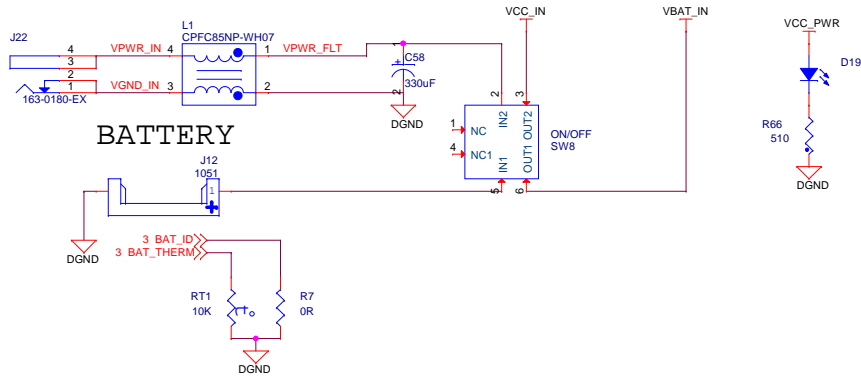


LAYOUT NOTE:
 USB 2.0 Differential Pair, annotated with a ring around the pair. Follow USB 2.0 routing guidelines.
 Length Match: +/- 100 mils
 Differential Impedance: 90 ohms

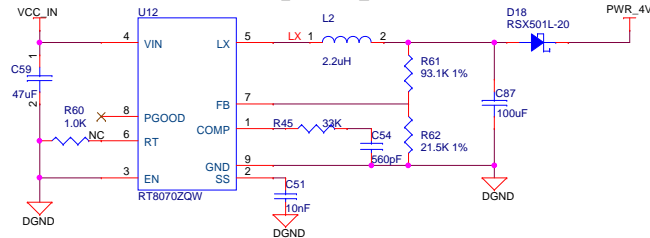
Title 07. SD CARD, AUDIO, CAMERA
Size A3
Document Number DART-SD800 CustomBoard
Project DART-SD800 CustomBoard
Rev 1.0
Designer: Leonid S.
Date: Monday, February 23, 2015
Approved By:
Sheet 7 **of** 8

08. POWER

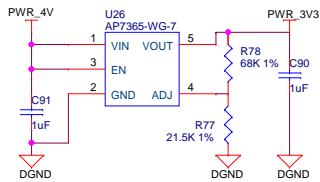
VCC-IN - 5V



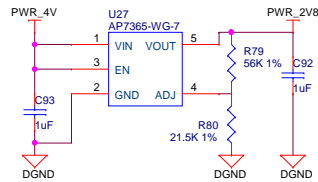
4V Battery replacement 4A



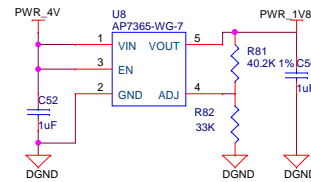
3.3V Base



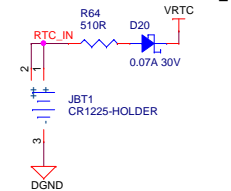
2.8V Base



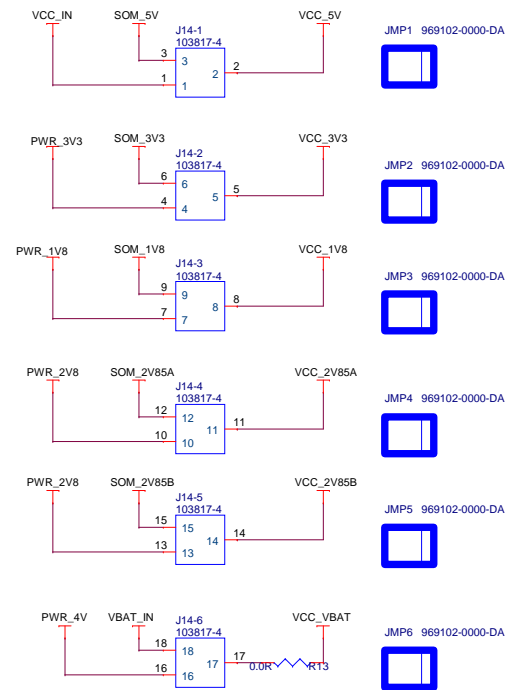
1.8V Base



RTC Battery



POWER SUPPLY Selection Jumpers



Title 08. POWER			
Size A3	Document Number DART-SD800 CustomBoard	Project DART-SD800 CustomBoard	Rev 1.0
Designer Leonid S.		Approved By	
Date Monday, February 23, 2015		Sheet 8 of 8	