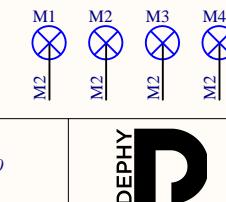
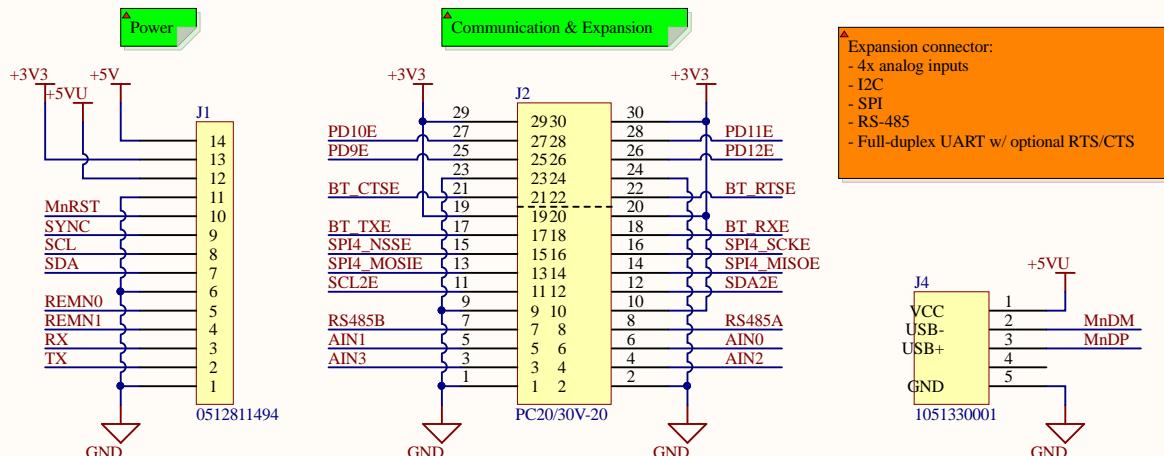
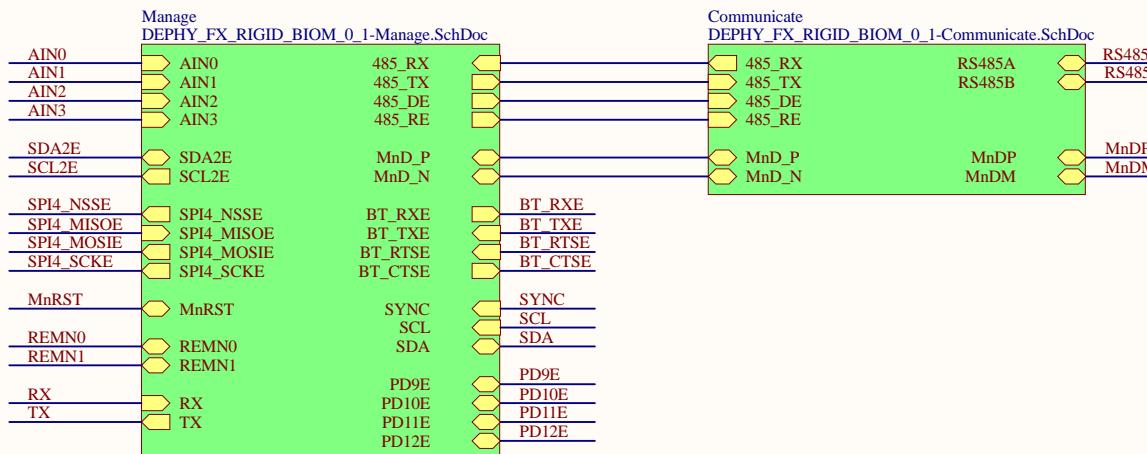


DEPHY_FX_RIGID BIOM_0_1B

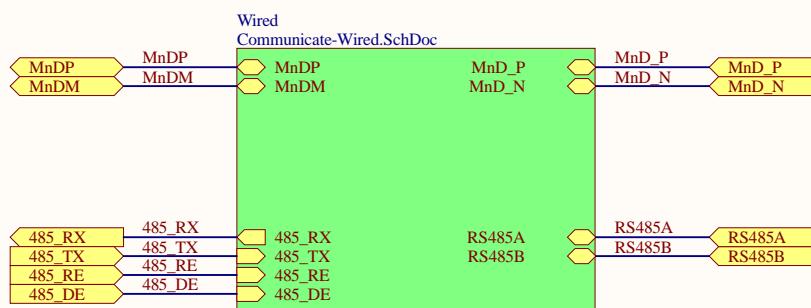
Integrated Controller

Logic



Title			Dephy, Inc. 50 Terminal St Building 2 Unit 520 Boston, MA 02129 USA
Size:	Letter	Number:	
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Sheet 1 of			
File: DEPHY_FX_RIGID BIOM_0_1.SchDoc			

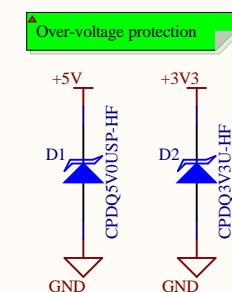
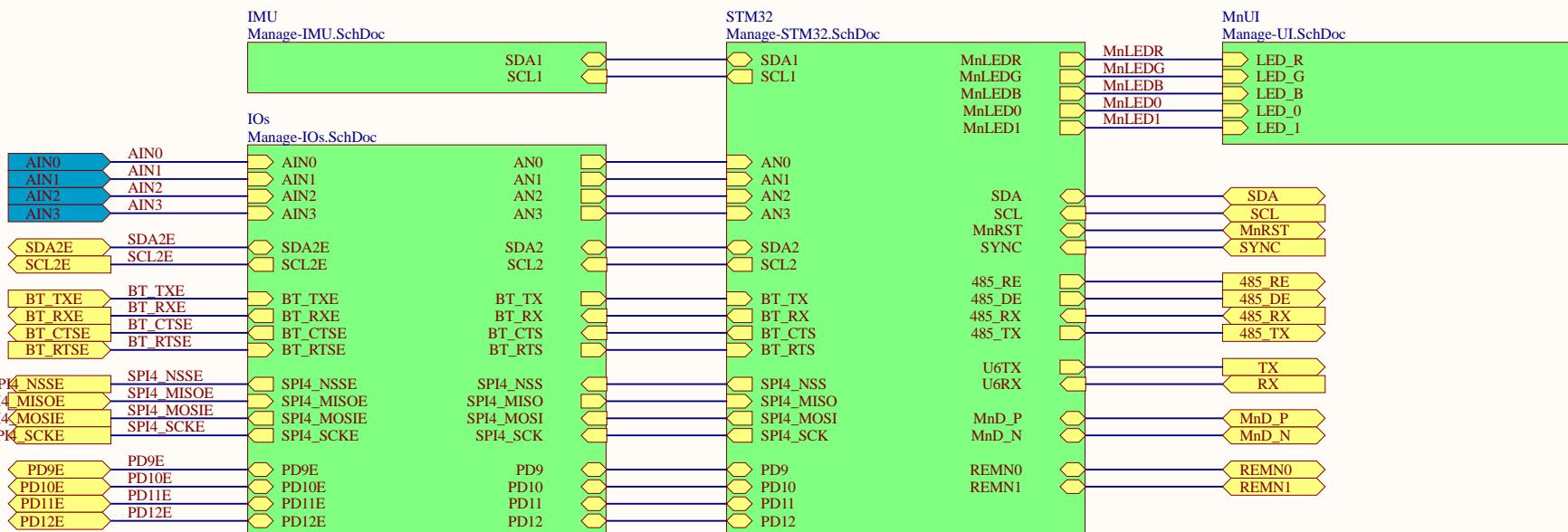
Communicate



Title			Dephy, Inc. 50 Terminal St Building 2 Unit 520 Boston, MA 02129 USA
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File:	DEPHY_FX_RIGID_BIOM_0_1-Communicate.SchDoc	Sheet 2 of	



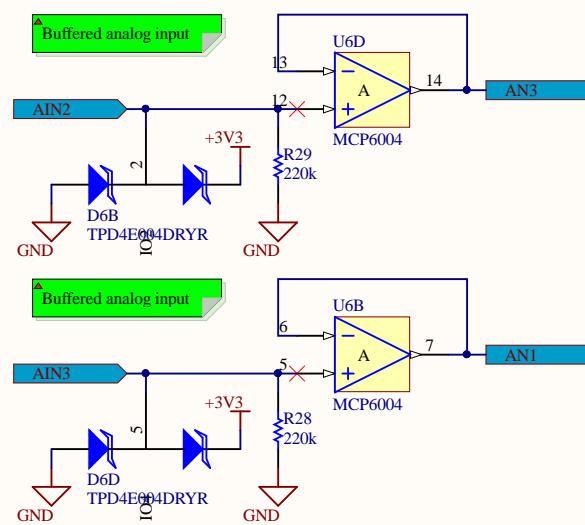
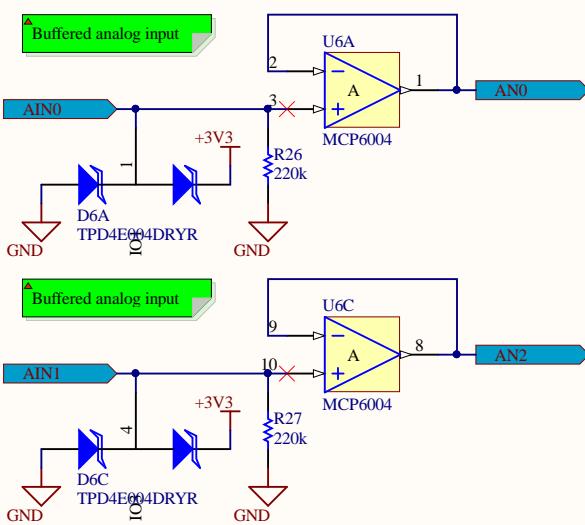
Manage



Title			Revision:	Dephy, Inc. 50 Terminal St Building 2 Unit 520 Boston, MA 02129 USA
Size:	Letter	Number:		
Date:	11/7/2017	Time:	11:03:48 AM	Sheet 4 of
File:	DEPHY_FX_RIGID_BIOM_0_1-Manage.SchDoc			

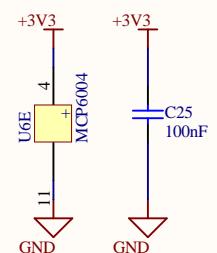
A

A



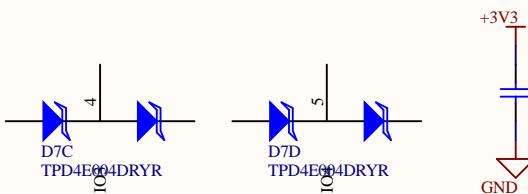
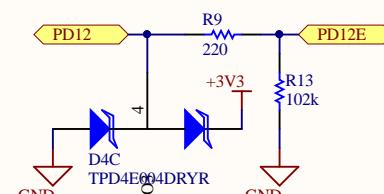
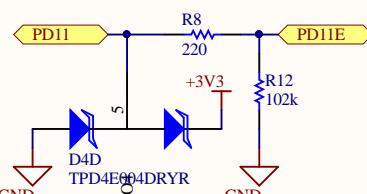
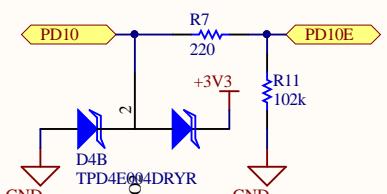
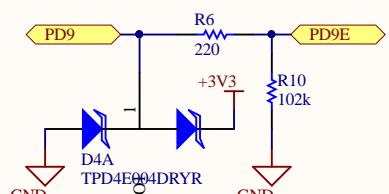
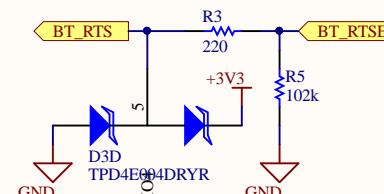
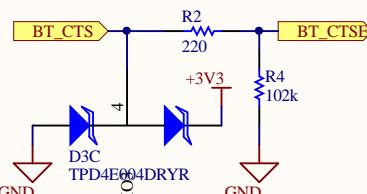
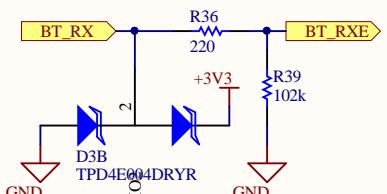
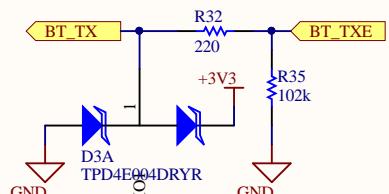
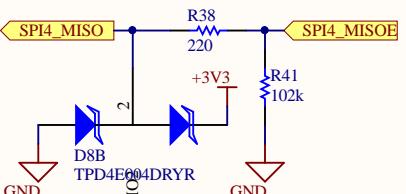
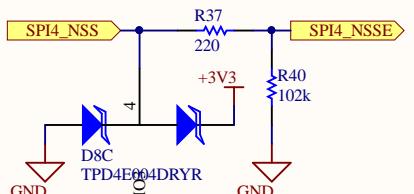
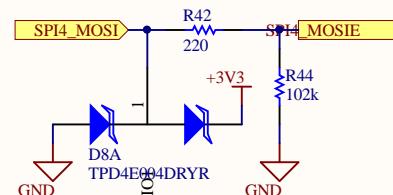
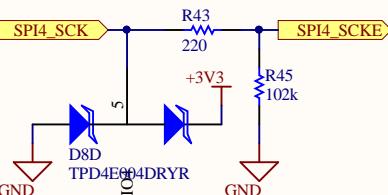
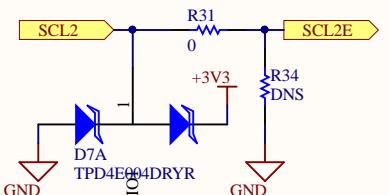
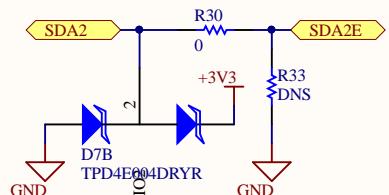
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B



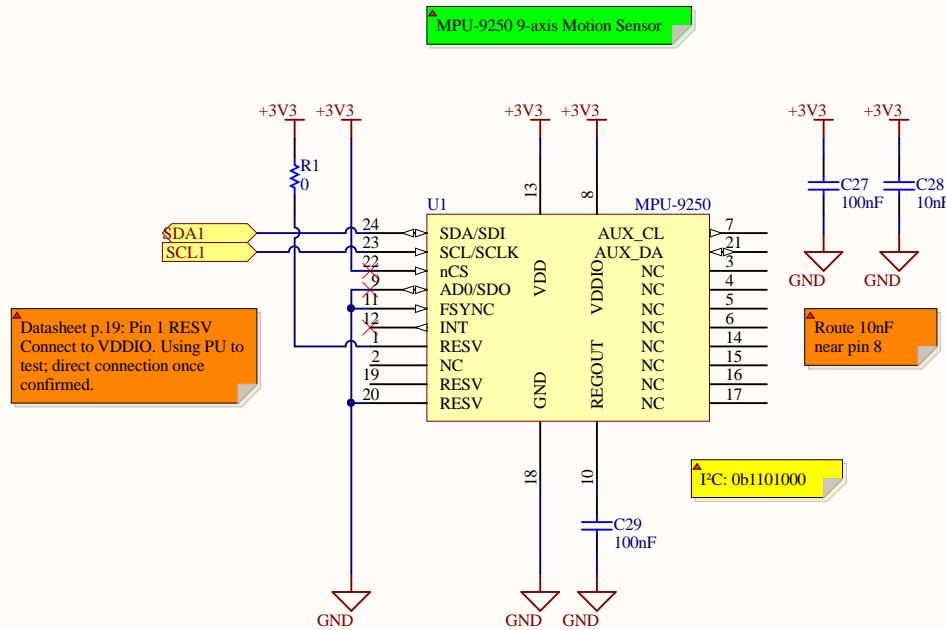
Title			Dephy, Inc. 50 Terminal St Building 2 Unit 520 Boston, MA 02129 USA
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* Protected 3V3 Digital I/Os



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Letter			
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File: Manage-DigitalIO.SchDoc			



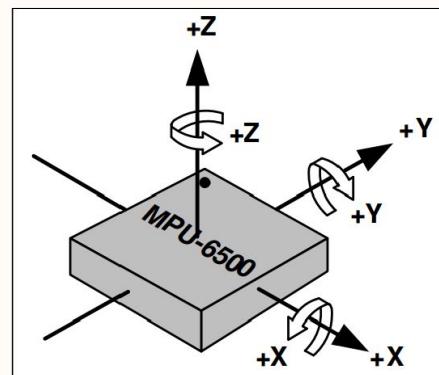


Pin Number	Pin Name	Pin Description
7	AUX_CL	I _C Master serial clock, for connecting to external sensors
8	VDDIO	Digital I/O supply voltage
9	AD0 / SDO	I _C Slave Address LSB (AD0); SPI serial data output (SDO)
10	REGOUT	Regulator filter capacitor connection
11	FSYNC	Frame synchronization digital input. Connect to GND if unused.
12	INT	Interrupt digital output (totem pole or open-drain) Note: This interrupt line should be connected to a pin on the Application Processor (AP) that can bring the AP out of suspend mode.
13	VDD	Power supply voltage and Digital I/O supply voltage
18	GND	Power supply ground
19	RESV	Reserved. Do not connect.
20	RESV	Reserved. Connect to GND.
21	AUX_DA	I _C master serial data, for connecting to external sensors
22	nCS	Chip select (SPI mode only)
23	SCL / SCLK	I _C serial clock (SCL); SPI serial clock (SCLK)
24	SDA / SDI	I _C serial data (SDA); SPI serial data input (SDI)
1 - 6, 14 - 17	NC	No Connect pins. Do not connect.

Table 10: Signal Descriptions

The exposed die pad is not required for heat-sinking, and should not be soldered to the PCB. Underfill is also not recommended. Soldering or adding underfill to the e-pad can induce performance changes due to package thermo-mechanical stress.

Could also be used with SPI



Title

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Number:

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File: Manage-IMU.SchDoc

Dephy, Inc.
50 Terminal St
Building 2 Unit 520
Boston, MA 02129
USA

DEPHY
D

A

A

B

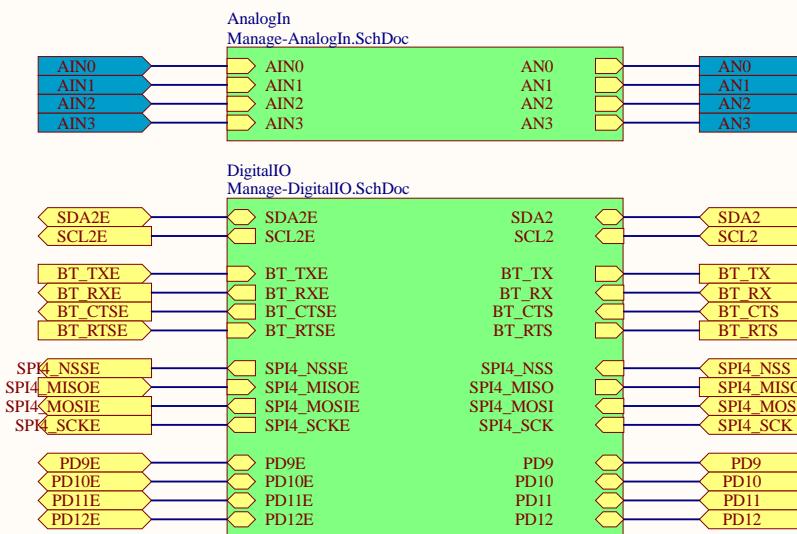
B

C

C

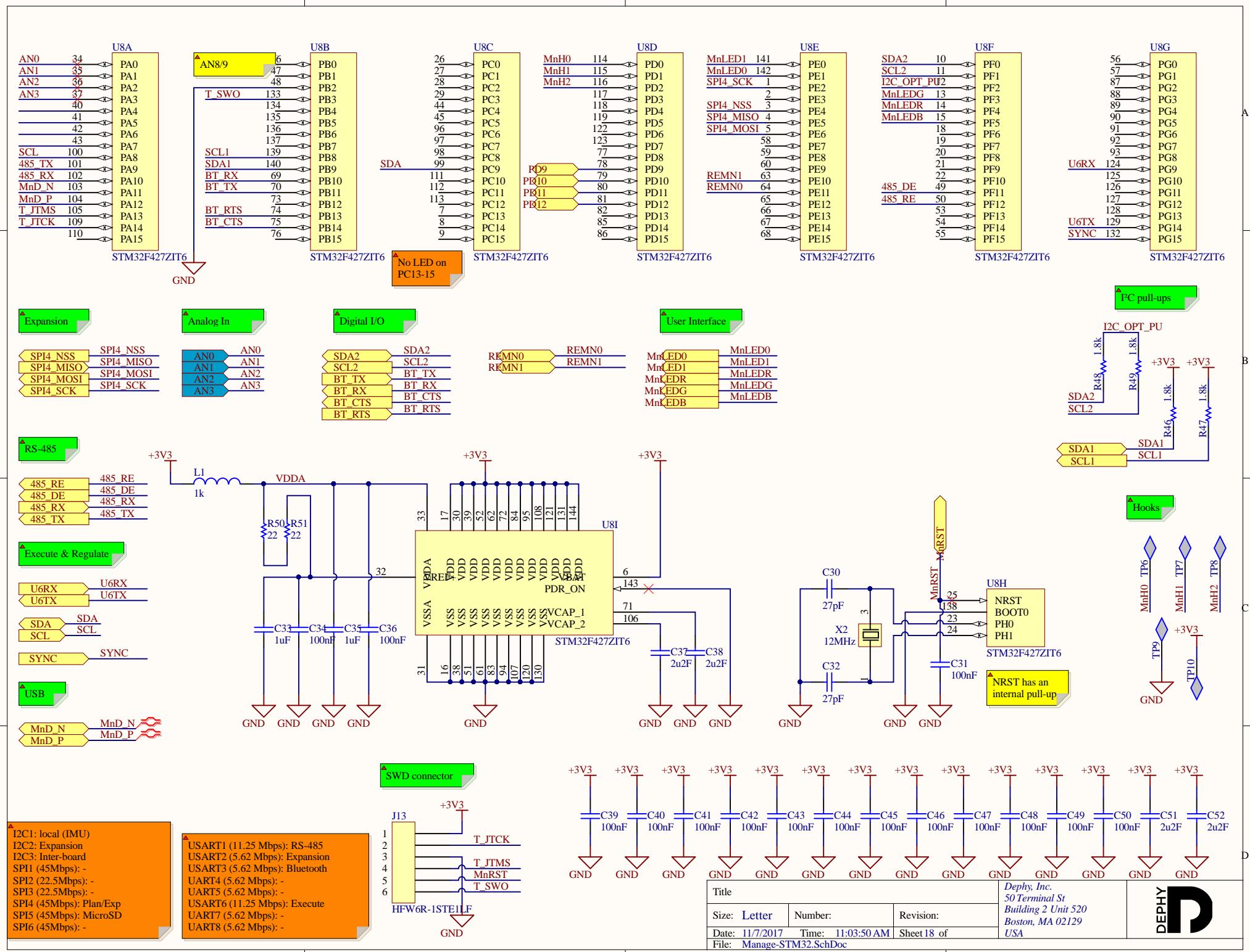
D

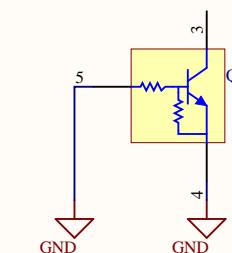
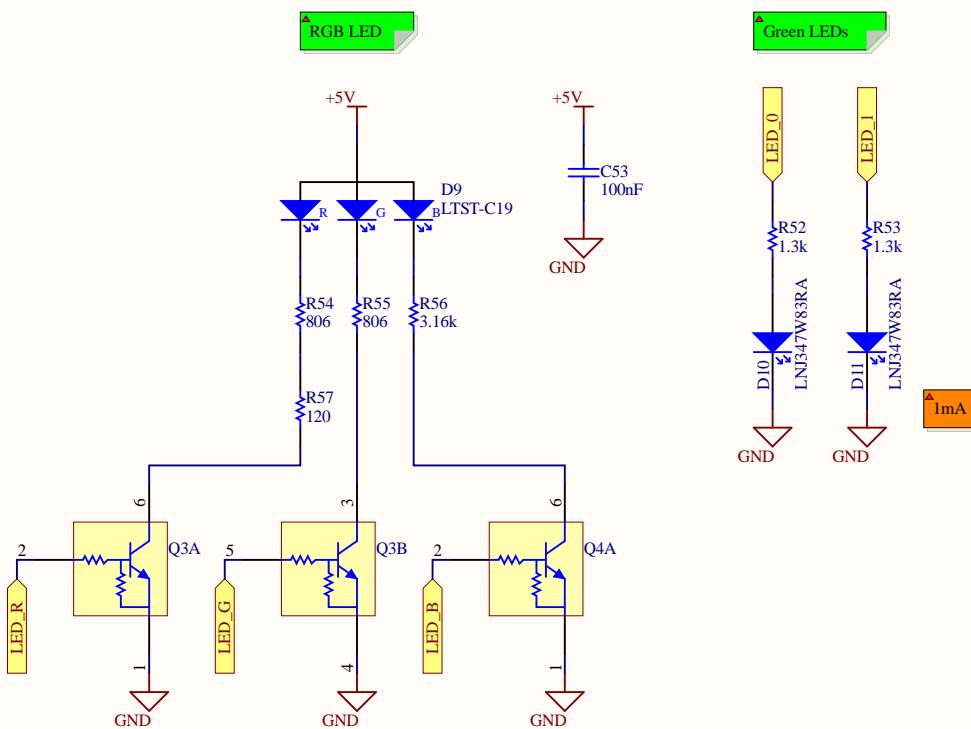
D



Title			Dephy, Inc. 50 Terminal St Building 2 Unit 520 Boston, MA 02129 USA
Size:	Letter	Number:	
Date:	11/7/2017	Time:	
File:	Manage-IOs.SchDoc	Sheet 17 of	



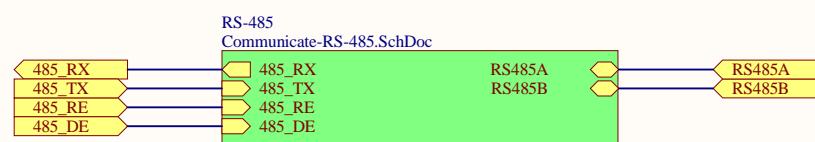




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Size:	Letter	Number:	
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File:	Manage-ULSchDoc	Sheet 19 of	

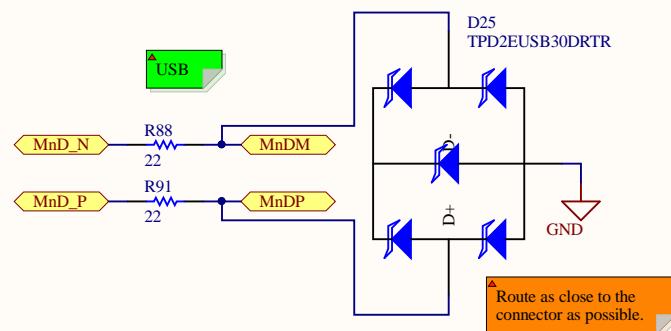
A

A



B

B



C

C

Title			Dephy, Inc. 50 Terminal St Building 2 Unit 520 Boston, MA 02129 USA
Size:	Letter	Number:	
Date:	11/7/2017	Time:	
File:	Communicate-Wired.SchDoc		



A

A

B

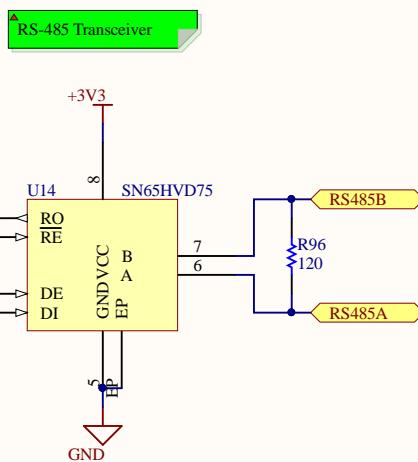
B

C

C

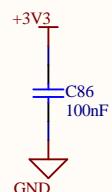
D

D



When RE = 1 RO is in Z mode: it's OK to tie 2 RO together.

On a typical configuration with 2 boards (120ohm) each we get a bus impedance of 60ohm. $3.3V/60 = 55mA$ for the driver. With 2 slave boards on a bus: 83mA. If Manage drives 4 Execute with SPI over RS-485 we can get 4 transceivers transmitting at the same time => 165mA. Let's plan for 200mA for this sheet.



Title			Dephy, Inc. 50 Terminal St Building 2 Unit 520 Boston, MA 02129 USA
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