

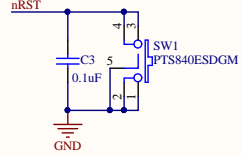
This figure is a template for an A3 drawing, featuring a grid and a title block. The grid is composed of 8 columns and 4 rows, labeled 1 through 8 horizontally and A through D vertically. The title block is located in the bottom right corner and contains the following information:

Title		
MANUCA AIR - COMPUTE MODULE		
Size	Number	Revision
A3		A
Date:	15/4/2020	Sheet 1 of 3
File:	C:\Proj\...Compute.SchDoc	Drawn By: Petrus

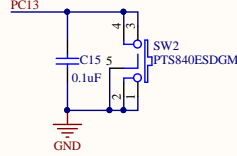
Two component symbols are placed on the grid:

- U_MCU
MCU.SchDoc
- U_Connectors
Connectors.SchDoc

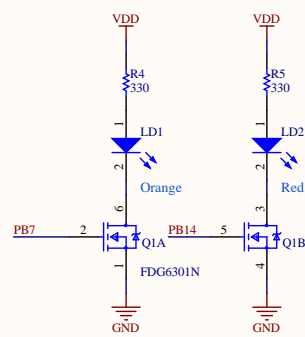
MCU Reset Button



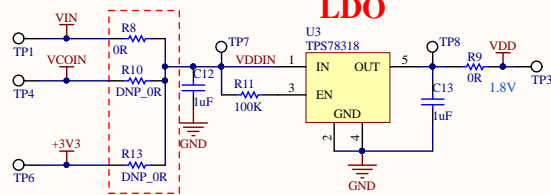
User Defined Button



LED Indicators



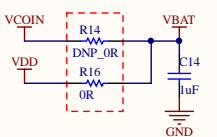
MAIN PWR SELECTION



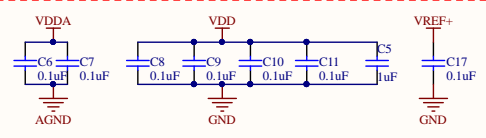
LDO

VDD: 1.8V (regulated DC, main power to MCU)
VDDCore: 1.2V (internally regulated from VDD)
VBPACK: 3.2V - 4.2V (Li-Po battery pack)
VCOIN: 2.4V - 3V (Li Coin-cell battery)
U5V: 5V (USB VBUS)
VIN: Combine power source output of U5V & VBPack
VBAT: Backup power for MCU RTC

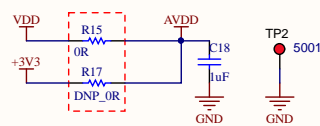
MCU BACKUP PWR SELECTION



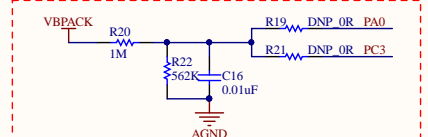
MCU Decoupling Caps



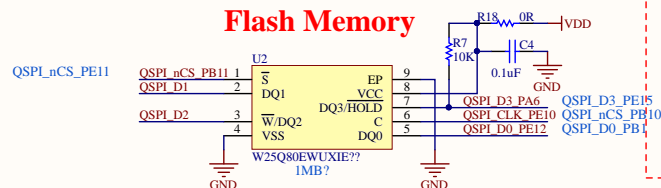
MCU ANALOG PWR SELECTION



LiPo Batt voltage measurement

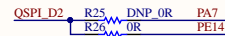
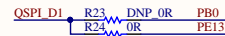
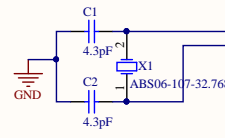


Flash Memory



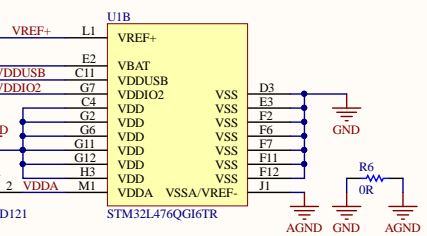
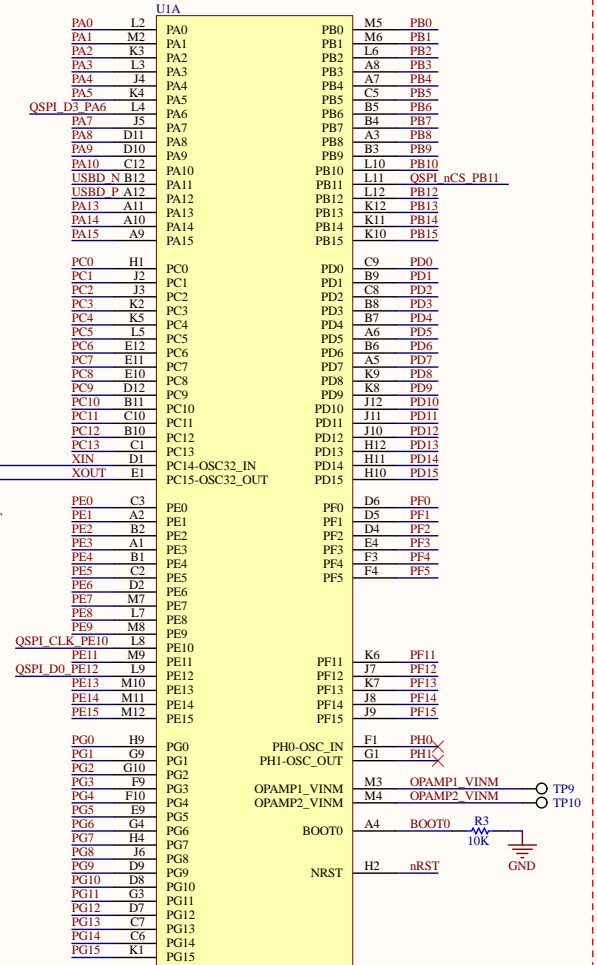
MCU

Reserve for USB expansion use:
USB_VBUS
USB_ID
USB_DM
USB_DP



To use USB features, set:
- VDDUSB = 3.3V

To use PG2..PG15 as 3.3V I/O, set:
- VDDIO2 = 3.3V



VDDIO2: Supply voltage for PG[15..2] I/Os, 1.08 ~ 3.6V
VDDUSB: Supply voltage for USB interface PA[12..9] I/Os, 3V ~ 3.6V

Title			MANUCA AIR - COMPUTE MODULE, MCU	
Size	Number	Revision		A
A3				
Date:	15/4/2020	Sheet	2	of 3
File:	C:\Proj\MCU.SchDoc	Drawn By:	Petrus	

A

A

B

B

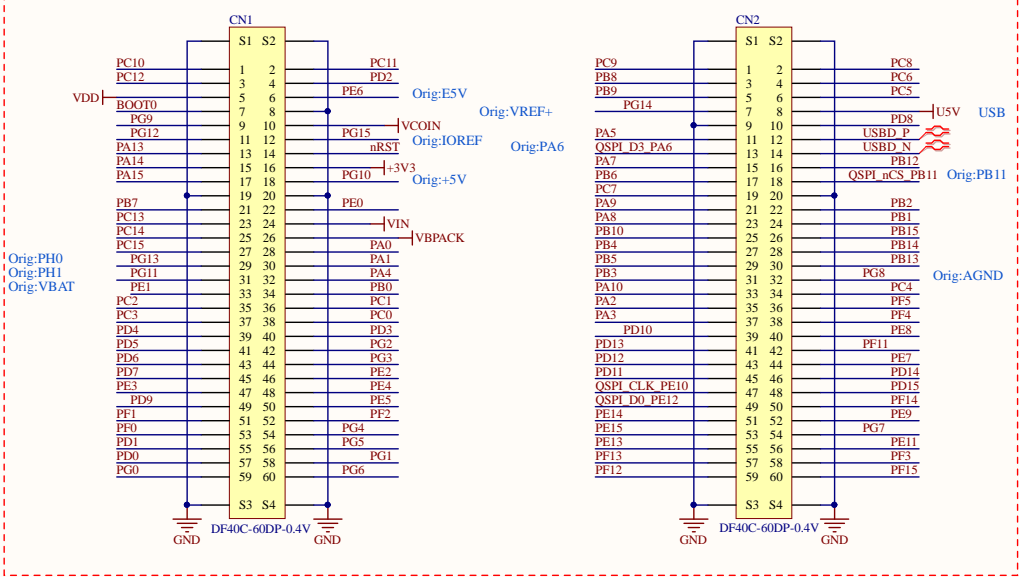
C

C

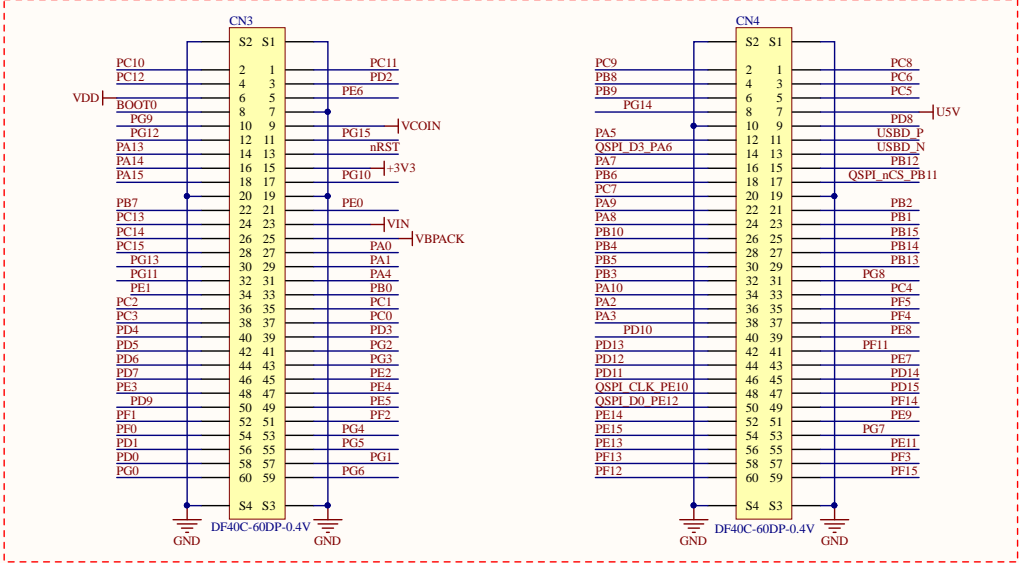
D

D

Top Layer Extension Connectors



Bottom Layer Extension Connectors



Title			MANUCA AIR - COMPUTE MODULE, CONNECTOR		
Size	Number		Revision		A
A3					
Date:	15/4/2020		Sheet	3	of 3
File:	C:\Proj\...\Connectors.SchDoc		Drawn By:	Petrus	