

CONTENTS :

PAGE1 - CONTENTS


PAGE2 - POWER, MODULE, GPIO, JTAG

PAGE3 - CSI, DSI, HDMI, USB

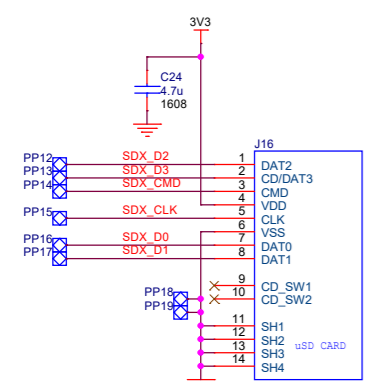
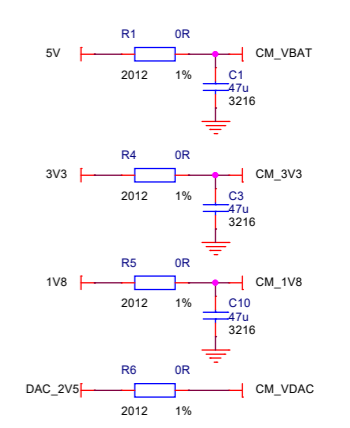
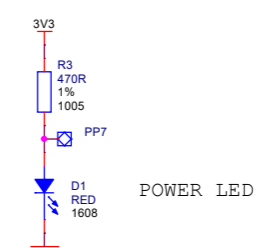
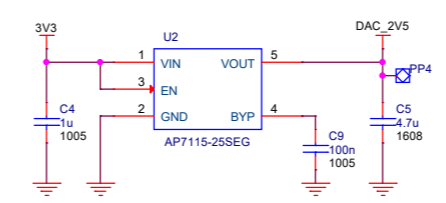
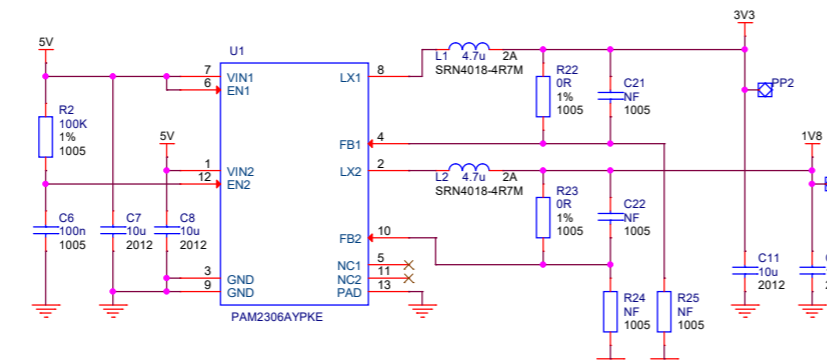
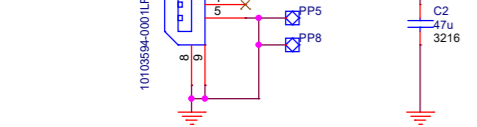
REVISION HISTORY:

10/04/2014 - V1.2 - Production Version

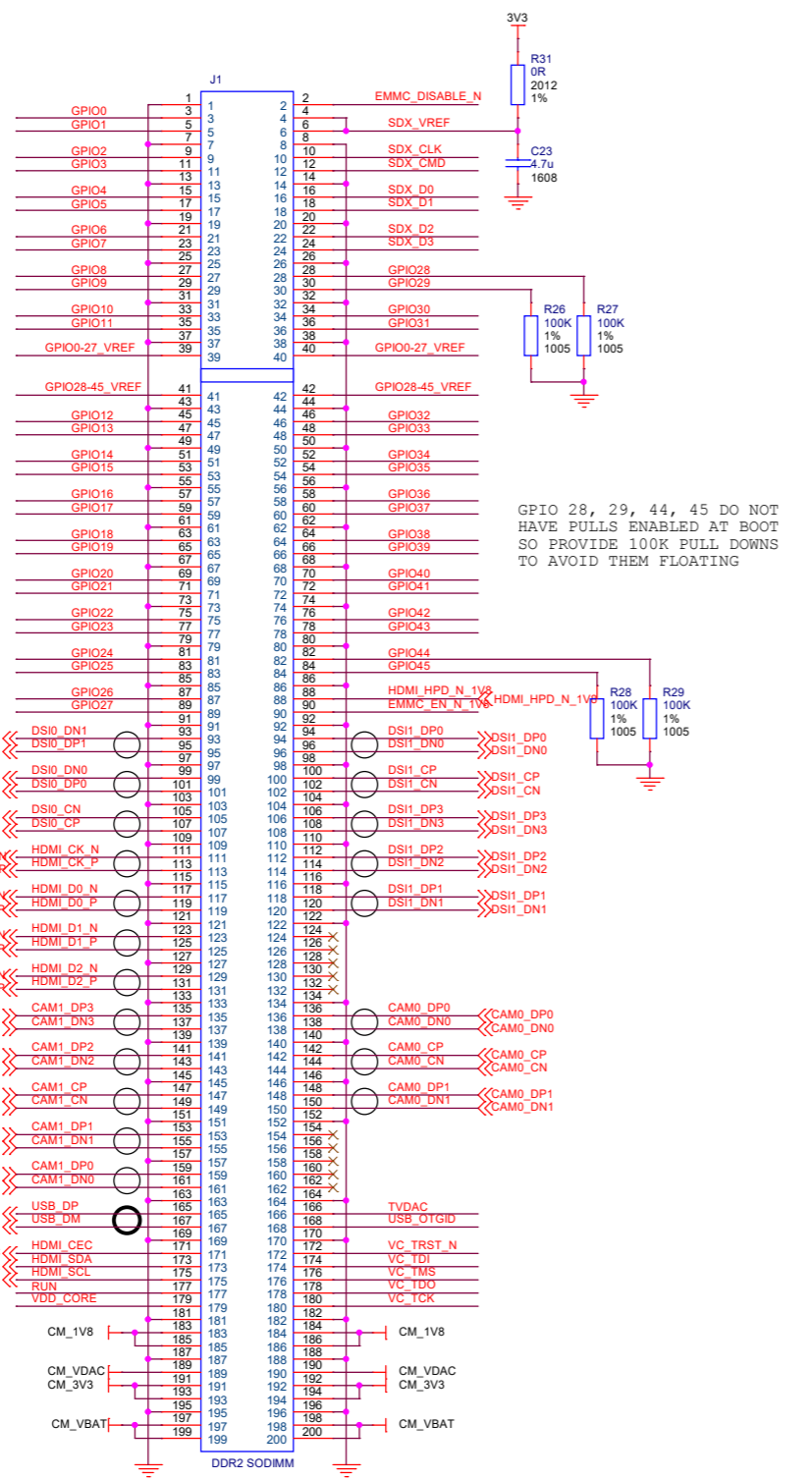
13/10/2016 - V3.0 - Production Version

		© Raspberry Pi 2015 www.raspberrypi.org
Title Raspberry Pi Compute Module IO Board		Drawn By James Adams
Size A3	Ref RPI-CMIO	Rev 3.0
Date: Thursday, October 13, 2016		Sheet 1 of 3

POWER IN



SD Card for modules with no on-board Flash (eMMC)



GPIO 28, 29, 44, 45 DO NOT HAVE PULLS ENABLED AT BOOT SO PROVIDE 100K PULL DOWNS TO AVOID THEM FLOATING

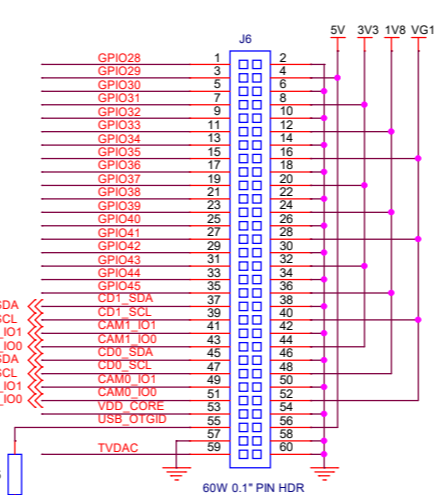
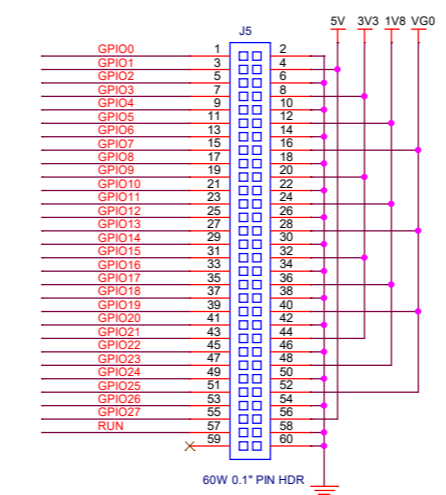
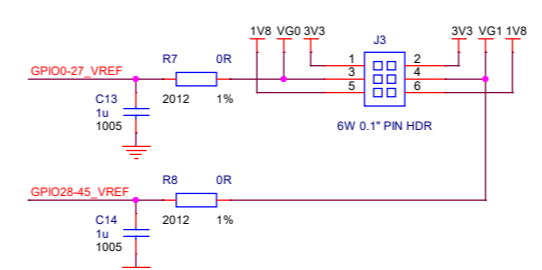
Route ringed signals as matched length 100R differential pairs

Route bold-ringed signals as matched length 90R differential pair

VDD_CORE used for module test only (do not use in normal operation, do not draw current from this pin!)

GPIO BANK 0/1 VOLTAGE SELECT:

Jumper Positions VG0 / VG1:
 1-3 / 2-4 = 3V3
 3-5 / 4-6 = 1V8
 NC = external source

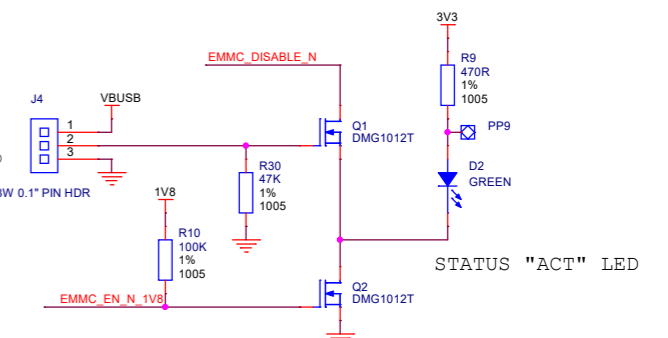


MODULE BOOT OPTIONS:

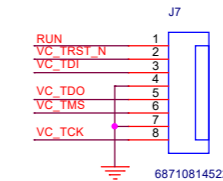
- BCM2835 BootROM boot from USB:
 - J4 set to enable USB boot
 - Plug host into micro USB socket J15 (VBUS=5V)
 - EMMC EN N 1V8 high at boot (input with 1.8k pullup)
 - EMMC_DISABLE_N therefore LOW
 - On power up BCM2835 can't access eMMC so boots from USB
 - Once booted, 2835 USB boot SW forces EMMC_EN_N_1V8 to enable access to eMMC
- BCM2835 BootROM boot from eMMC:
 - Nothing plugged into micro USB socket J15 (VBUS=0V)
 - OR J4 set to disable USB Boot
 - EMMC_DISABLE_N therefore HIGH
 - On power up BCM2835 boots from eMMC
 - EMMC_EN_N_1V8 can be used as status LED

USB BOOT ENABLE:

Jumper Positions:
 1-2 = USB BOOT ENABLED
 2-3 = USB BOOT DISABLED

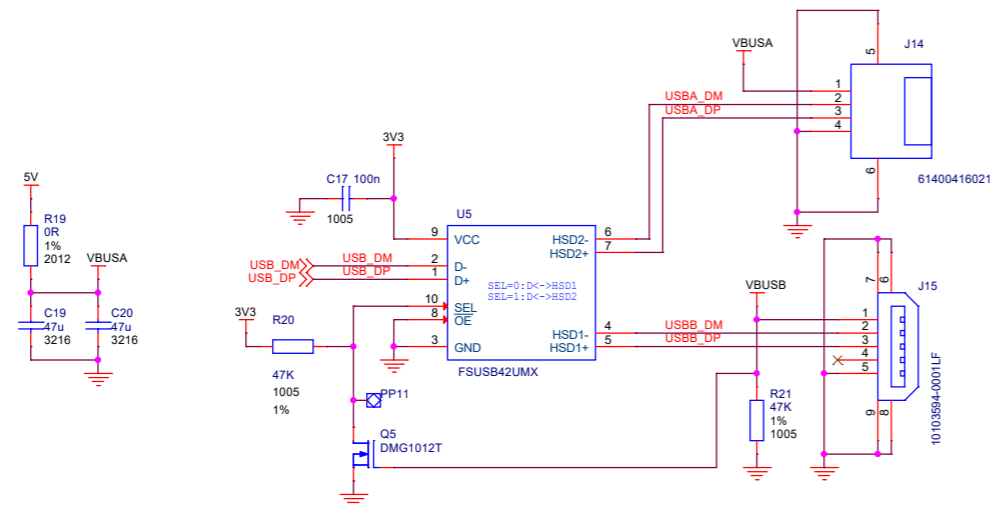
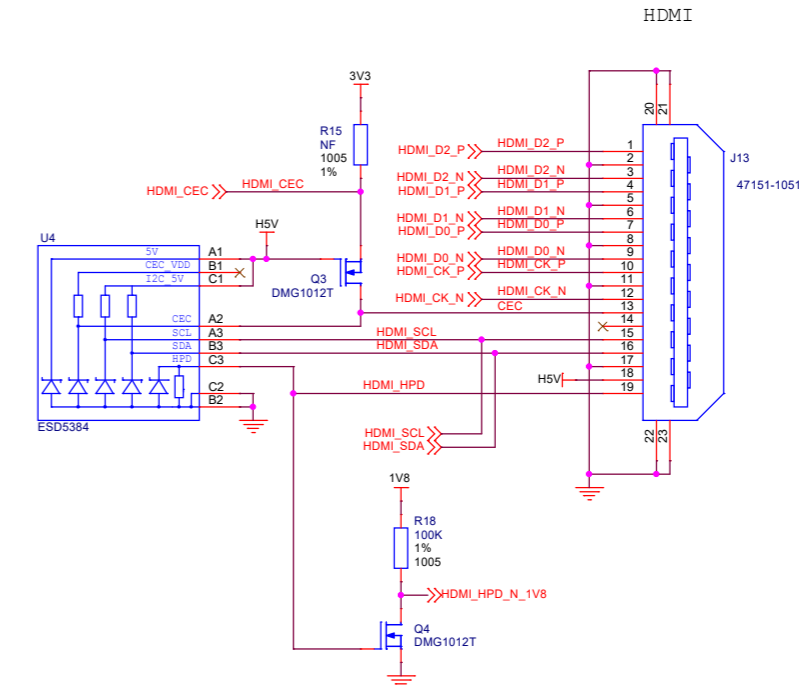
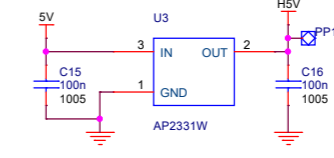
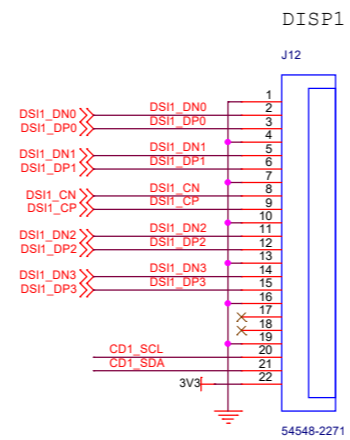
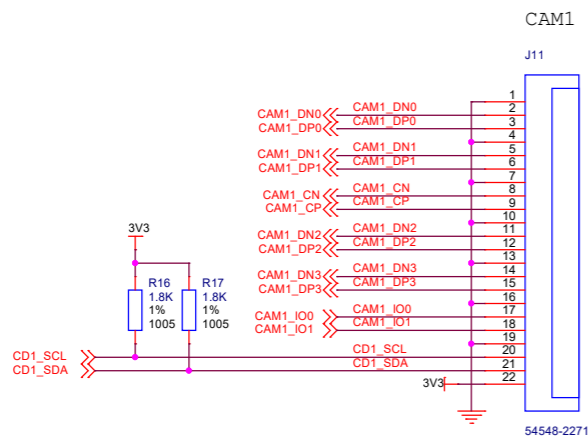
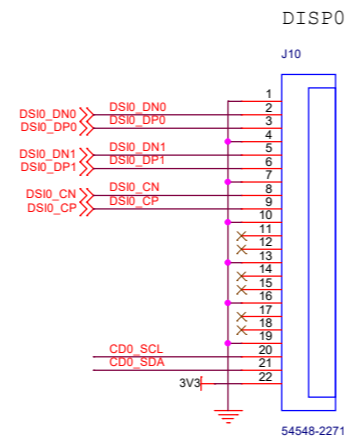
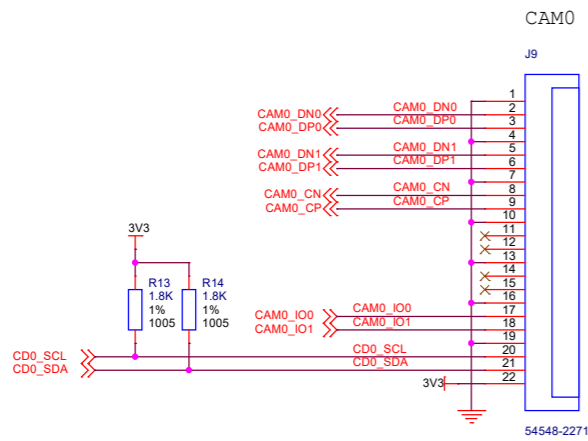


VIDEOCORE JTAG



Raspberry Pi © Raspberry Pi 2015
 www.raspberrypi.org

Title	Raspberry Pi Compute Module IO Board	Drawn By	James Adams
Size	A2	Ref	RPI-CMIO
Date	Thursday, October 13, 2016	Sheet	2 of 3



USB A (HOST)

uUSB B (SLAVE, USB BOOT)