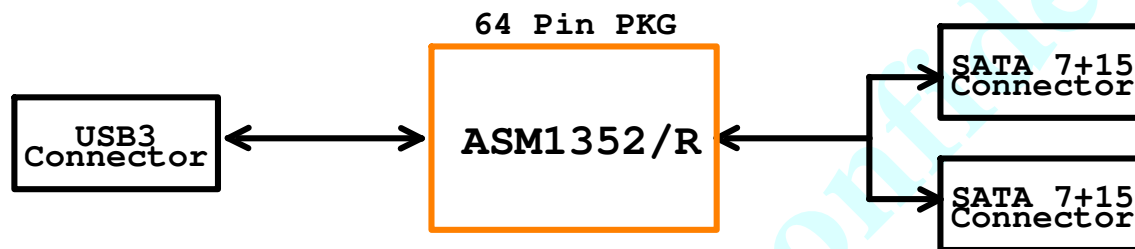


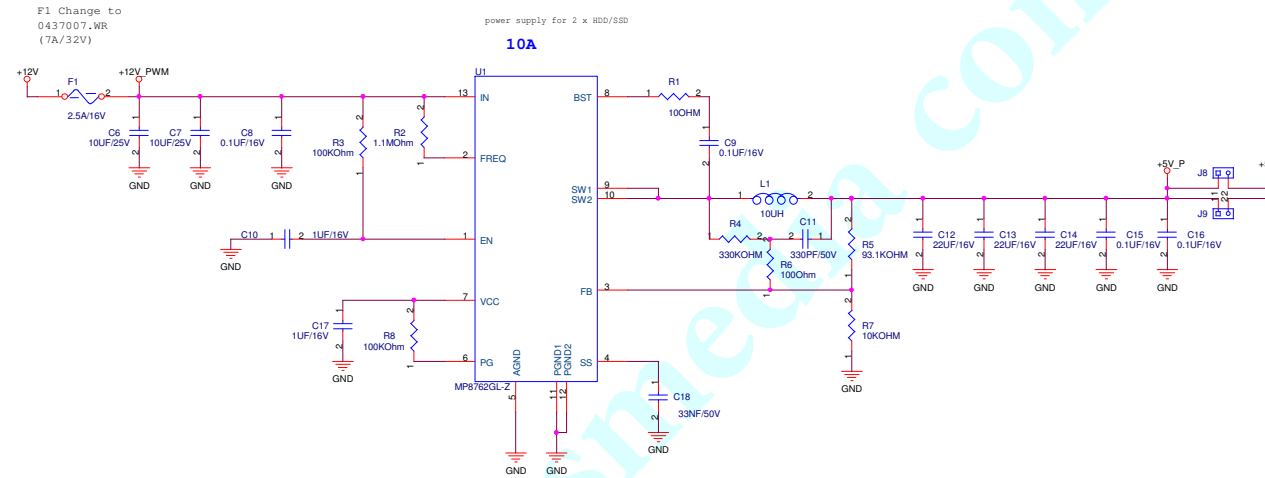
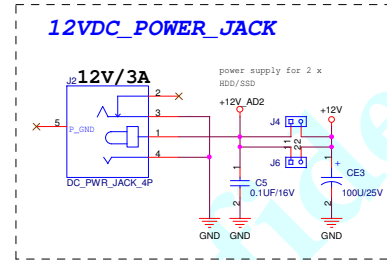
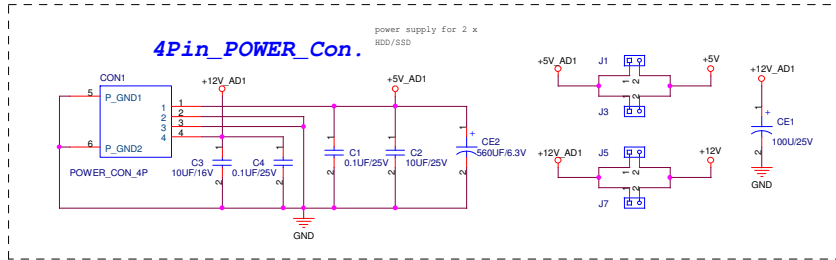
ASM1352R Self Power Schematics
Revision 0.2

TITLE	SHEET
COVER SHEET	1
BLOCK DIAGRAM	2
SYSTEM POWER-12V/5V	3
SYSTEM POWER-3V3/1V2	4
ASM1352/R	5
SATA_CONNECTOR_64	6

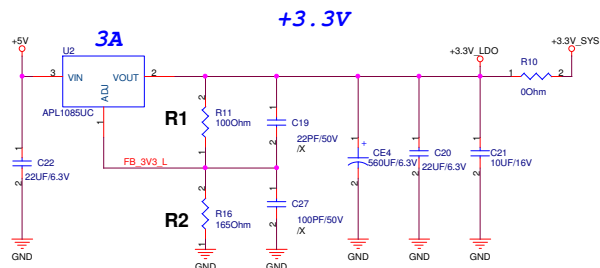
asmedia confidential



High power for 2xHDDs (5400/7200/1000rpm)



check with power solution vendor



$$V_{out} = 1.25(1 + R2/R1)$$

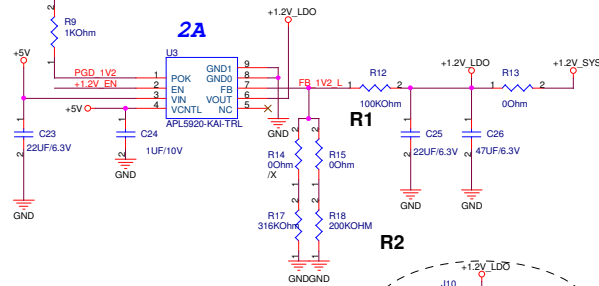
$$3.3 = 1.25(1 + 165/100)$$

$$2.5 = 1.25(1 + 100/100)$$

$$102 = 165 // 270$$

RS2

+1.2V For ASM1352/R

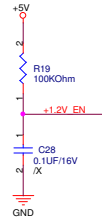


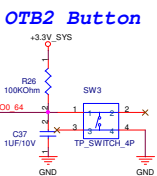
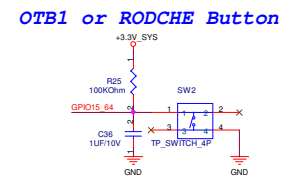
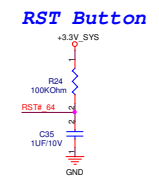
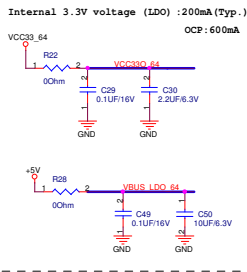
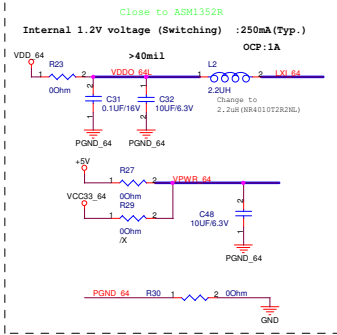
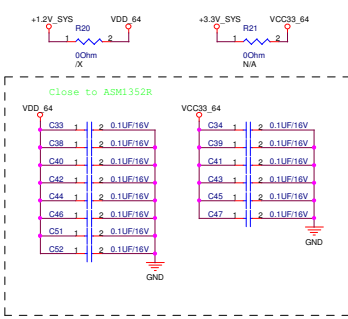
$$V_{out} = 0.8(1 + R1/R2)$$

$$1.053 = 0.8(1 + 100K/316K)$$

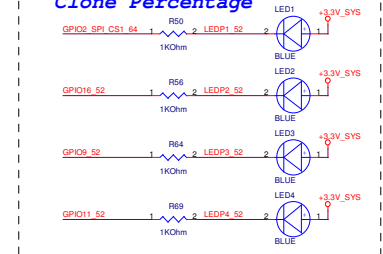
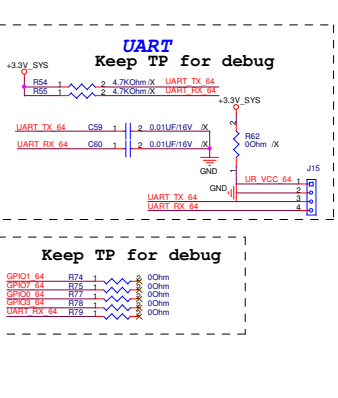
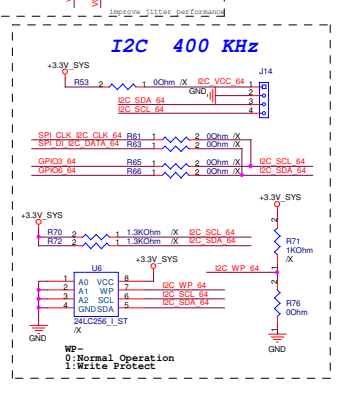
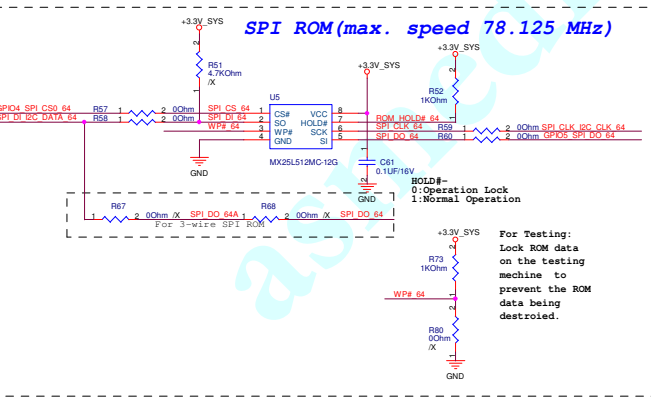
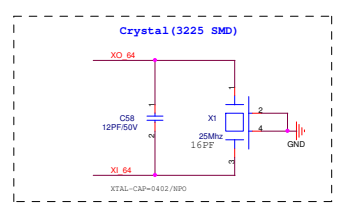
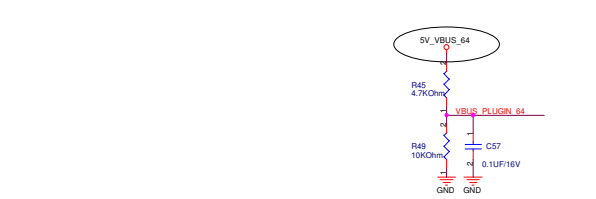
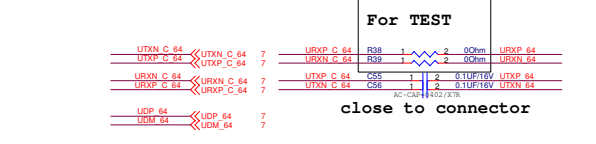
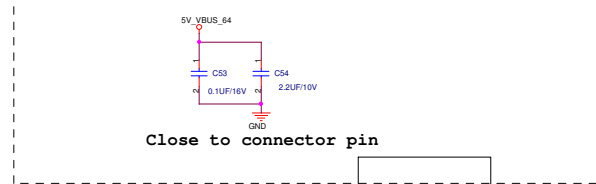
$$1.21 = 0.8(1 + 100K/195K) \quad 195K = 390K // 390K$$

RS1

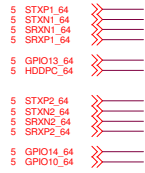




USB3.1 Micro B (Diff. Z = 80 ohm; length < 1 inch for 10Gbps)



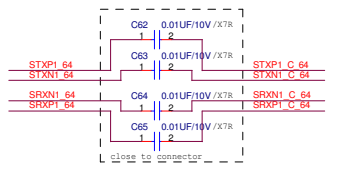
SATA



FAN&LED



SATA(Diff. Z = 90 ohm)



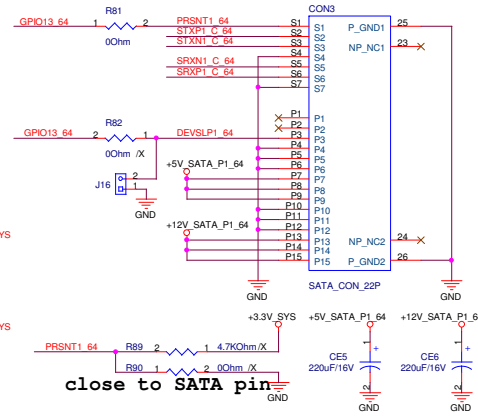
Active LED1



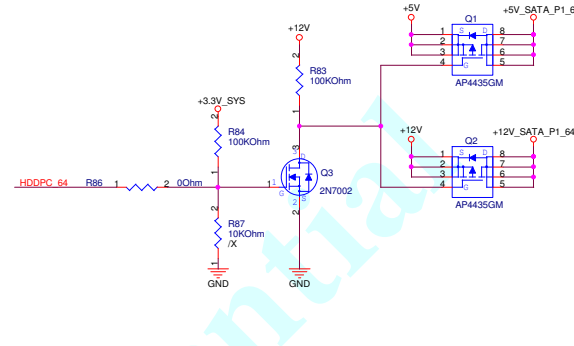
Error LED1



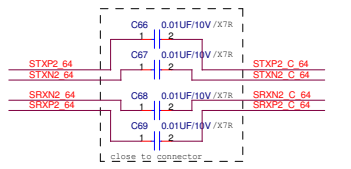
SATA_CON1



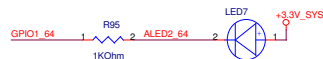
HDD_POWER_Control



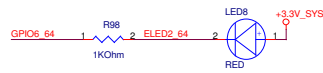
SATA(Diff. Z = 90 ohm)



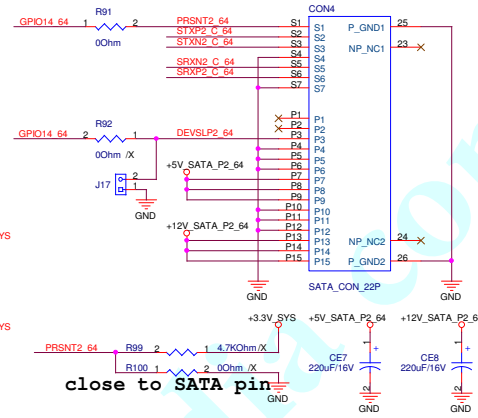
Active LED2



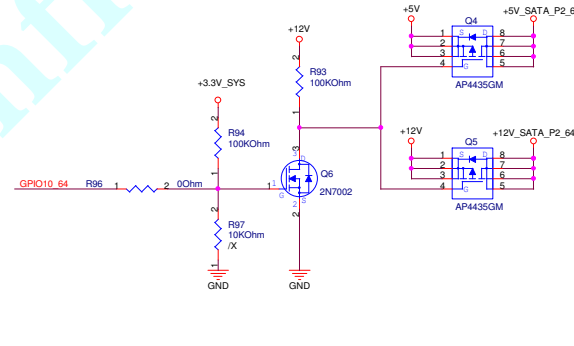
Error LED2



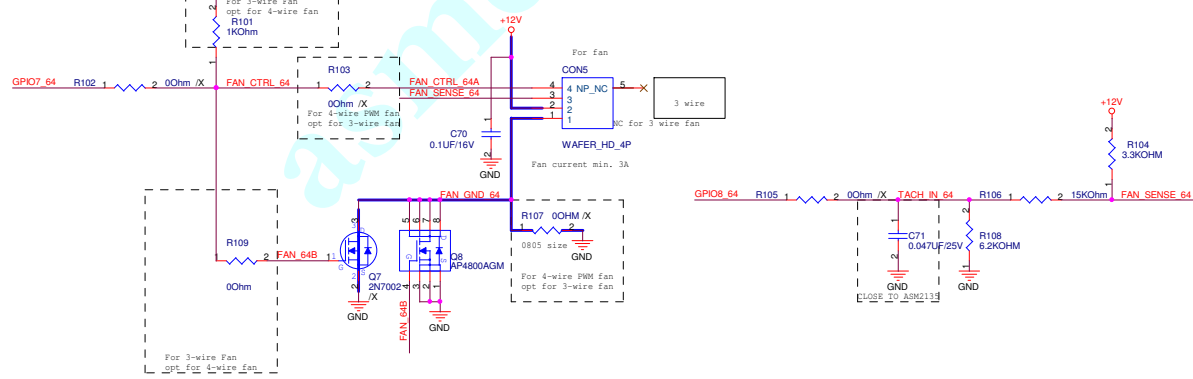
SATA_CON2



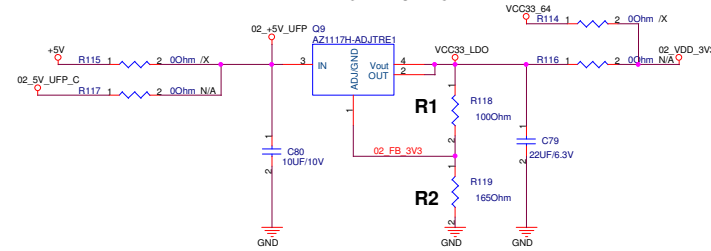
HDD_POWER_Control



FAN_CONN for 3-wire fan

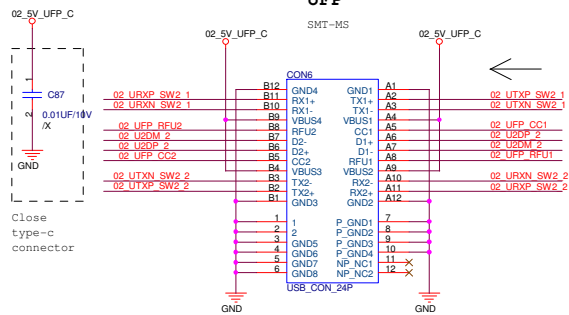
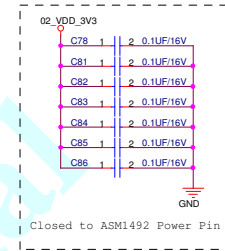
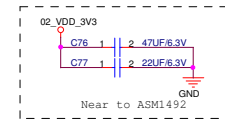
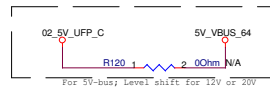


For ASM1542

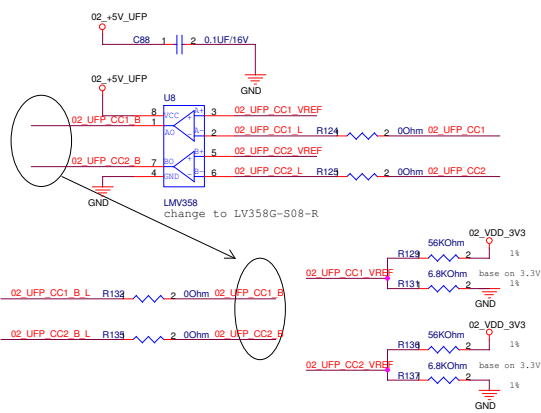
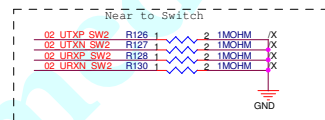
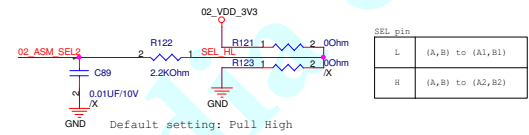
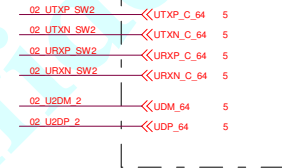
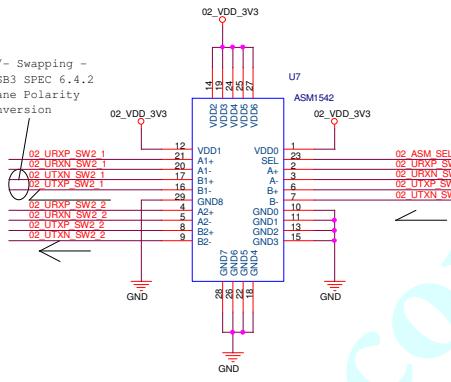


$$V_{out} = 1.25(1 + R2/R1)$$

$$3.3 = 1.25(1 + 165/100)$$



+/- Swapping -
USB3 SPEC 6.4.2
Lane Polarity
Inversion



Closed to ASM1542



Title			ASM1542 USB Type-C
Size			Document Number
C			ASM1352R reference schematic
Date			Friday, November 21, 2014
Sheet			7 of 7
Rev			1.0