EAH6570(C242PI)Repair Guide

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CSC-GRMA

ASUS Model name	EAH6570/DIS/512MD5
ASUS P/N	80-C1CQSA-J0A01
Graphics Engine	ATI Radeon HD 6570
GPU P/N	02G050007001
Bus Standard	PCI Express 2.1
Video Memory	GDDR5 512MB
Engine Clock	650 MHz
Memory Clock	1800 MHz (900 MHz GDDR5)
RAMDAC	400 MHz
Memory Interface	128-bit

Page1. Basic Information about the Model

Page2. Block Diagram

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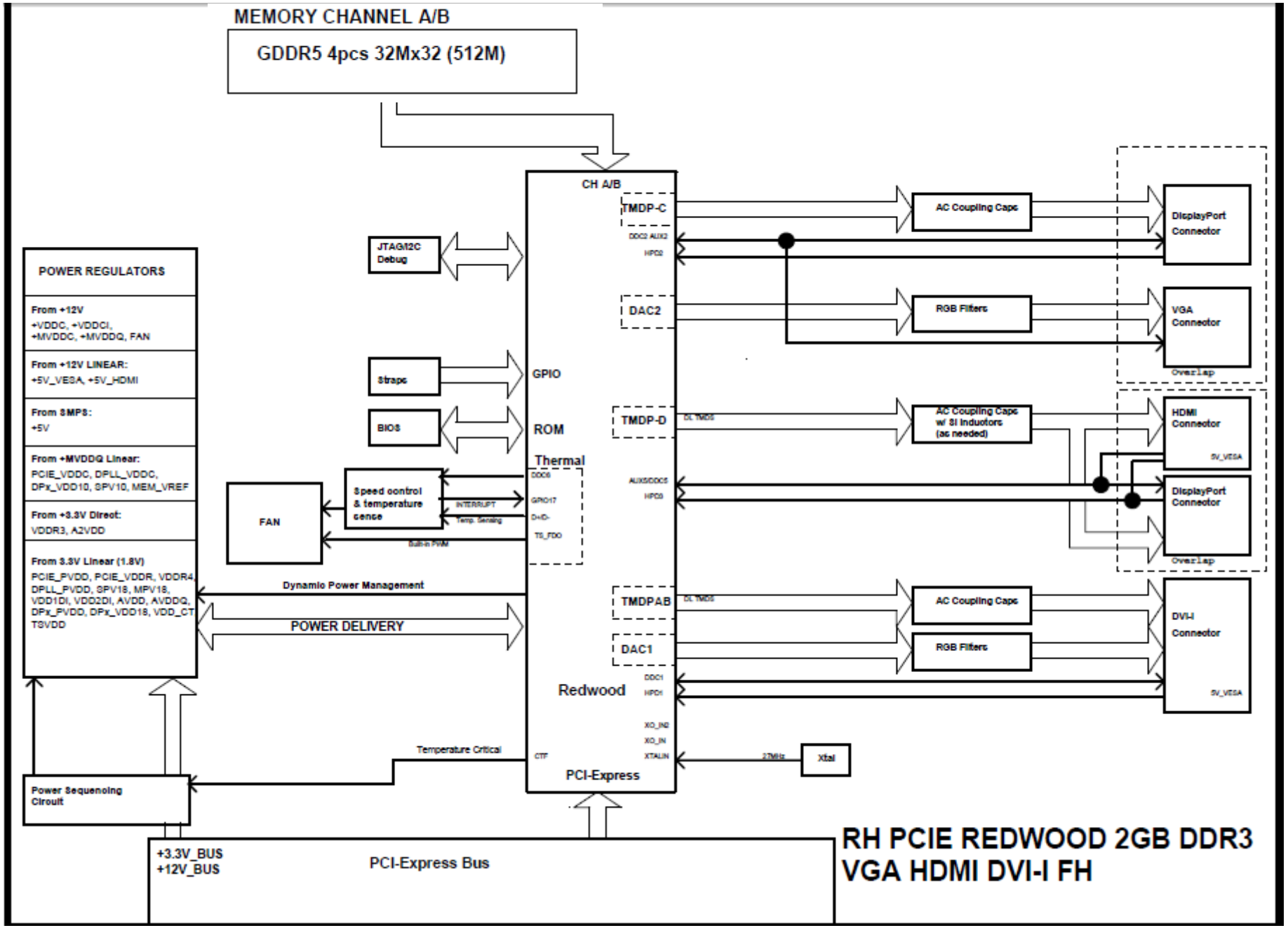
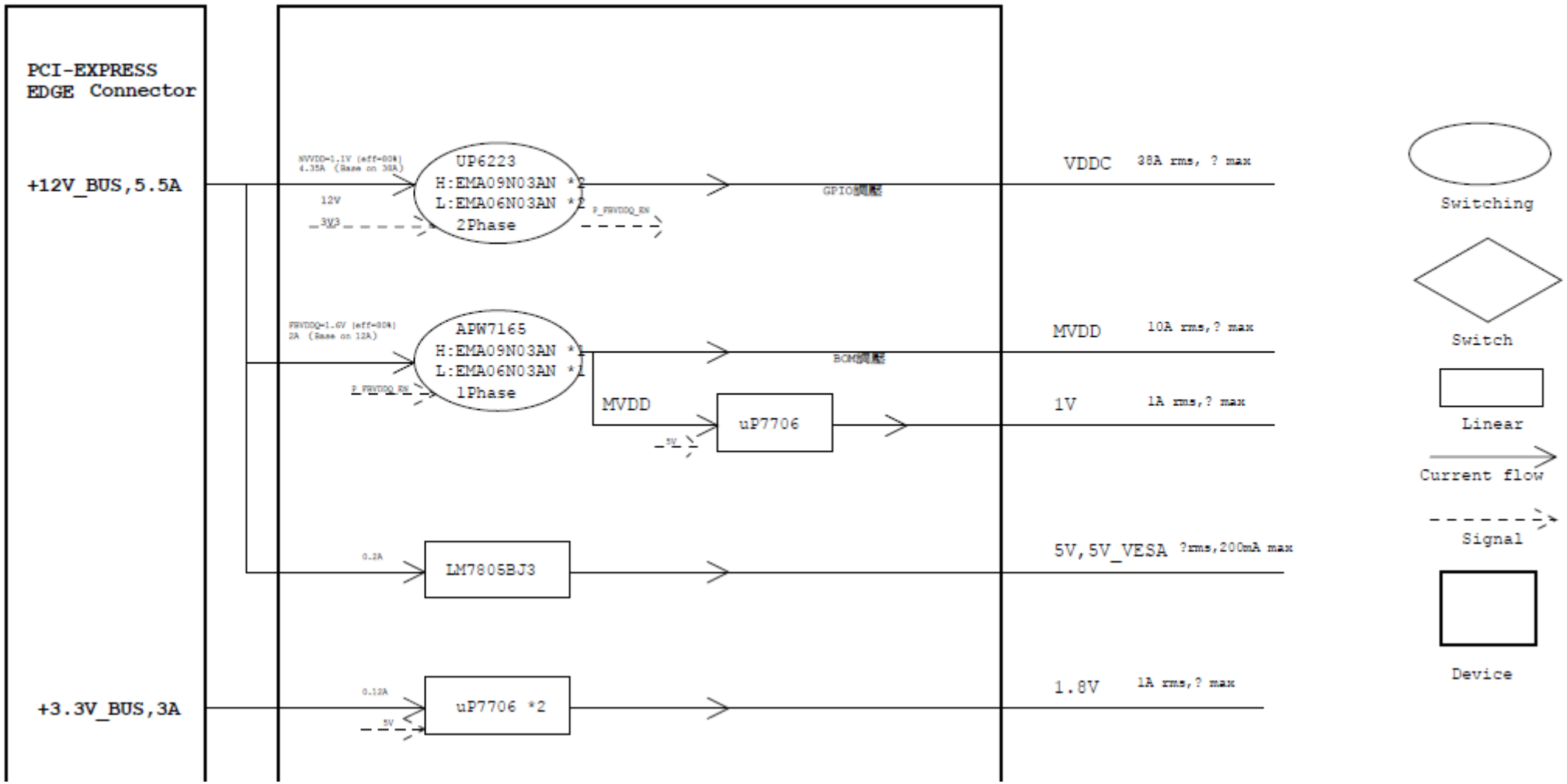
Page5. Important Signal map (Top side)

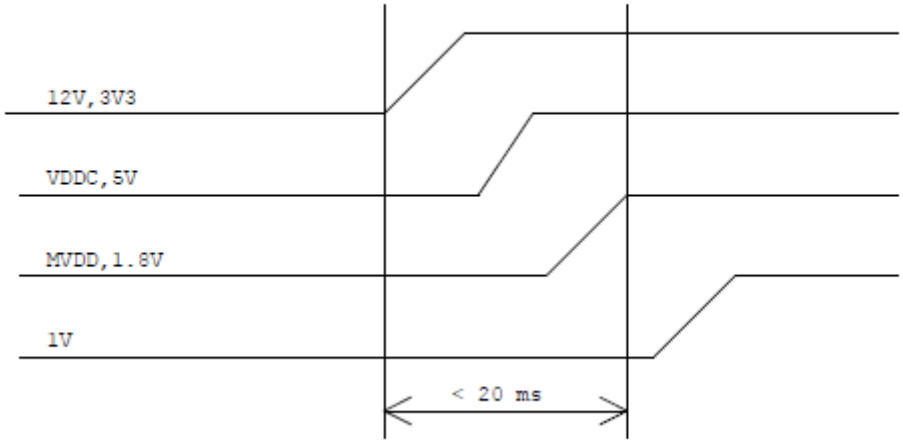
Page6. Important Signal map (bottom side)

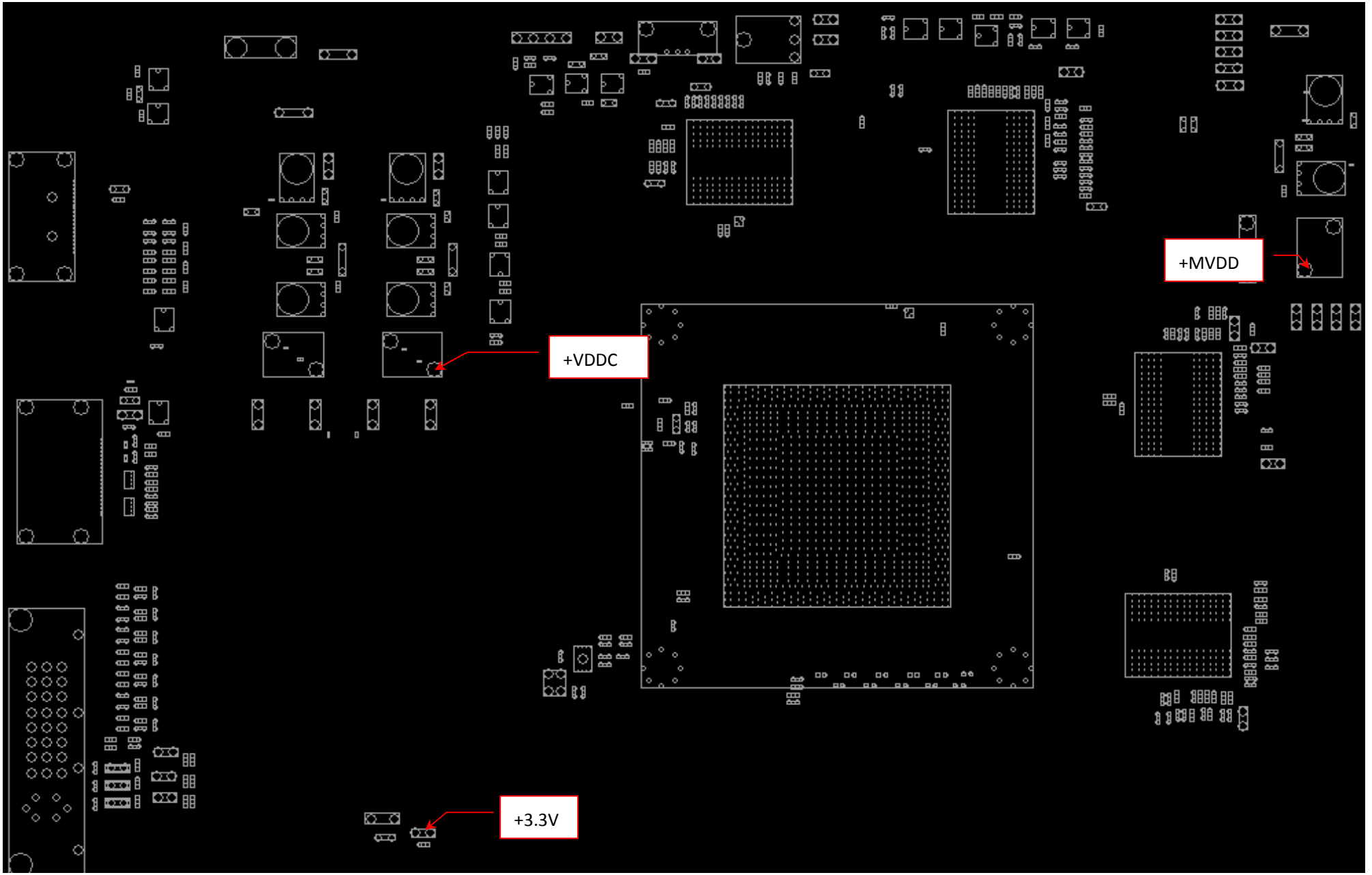

MEMORY CHANNEL A/B
GDDR5 4pcs 32Mx32 (512M)
CH A/B
TMDP-C
DDC2 AUX2
HPD2
DAC2
GPIO
ROM
Thermal
DDC6
GPIO17
D+/D-
TS_FDO
TMDP-D
AUX5/DDC5
HPD5
TMDPAB
DAC1
DDC1
HPD1
Redwood
XO_IN2
XO_IN
XTALIN
CTF
PCI-Express
JTAG/I2C Debug
Straps
BIOS
FAN
Speed control & temperature sence
INTERRUPT
Temp. Sensing
Built-in PWM
Dynamic Power Management
POWER DELIVERY
Temperature Critical
27MHz
Xtal
Power Sequencing Circuit
POWER REGULATORS
From +12V
+VDDC, +VDDCI, +MVDDC, +MVDDQ, FAN
From +12V LINEAR:
+5V_VESA, +5V_HDMI
From SMPS:
+5V
From +MVDDQ Linear:
PCIE_VDDC, DPLL_VDDC, DPx_VDD10, SPV10, MEM_VREF
From +3.3V Direct:
VDDR3, A2VDD
From 3.3V Linear (1.8V)
PCIE_PVDD, PCIE_VDDR, VDDR4, DPLL_PVDD, SPV18, MPV18, VDD1DI, VDD2DI, AVDD, AVDDQ, DPx_PVDD, DPx_VDD18, VDD_CT TSVDD
AC Coupling Caps
DisplayPort Connector
RGB Filters
VGA Connector
Overlap
DL TMDS
AC Coupling Caps w/ SI Inductors (as needed)
HDMI Connector
5V_VESA
DisplayPort Connector
Overlap
AC Coupling Caps
RGB Filters
DVI-I Connector
5V_VESA
+3.3V_BUS
+12V_BUS
PCI-Express Bus
RH PCIE REDWOOD 2GB DDR3
VGA HDMI DVI-I FH

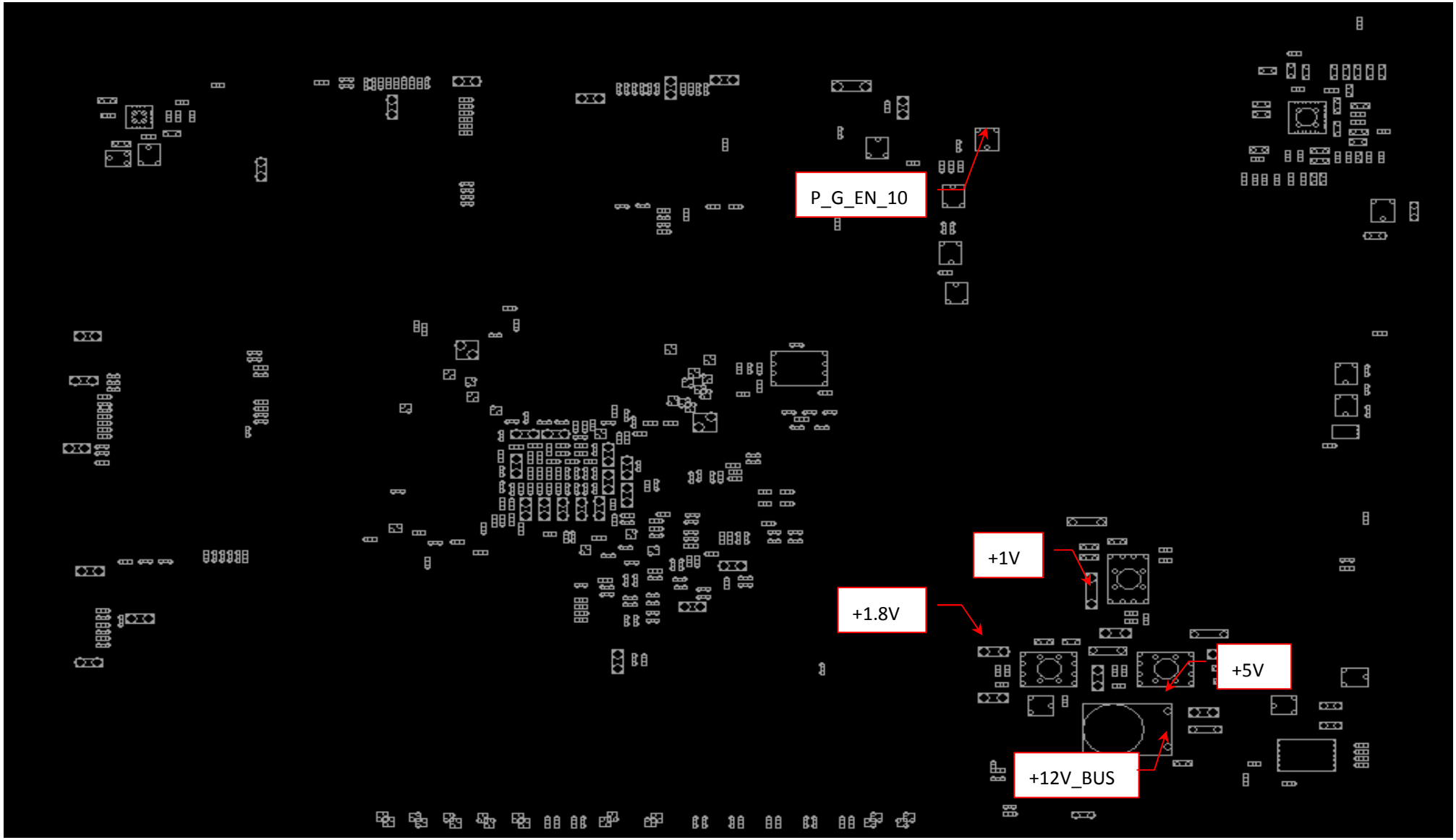
Power Flow :


PCI-EXPRESS
EDGE Connector
+12V_BUS,5.5A
+3.3V_BUS,3A
UP6223
H:EMA09N03AN *2
L:EMA06N03AN *2
2Phase
12V
3V3
P_FBVDDQ_EN
APW7165
H:EMA09N03AN *1
L:EMA06N03AN *1
1Phase
MVDD
uP7706
5V
LM7805BJ3
uP7706 *2
VDDC
38A rms, ? max
MVDD
10A rms,? max
1V
1A rms,? max
5V,5V_VESA
?rms,200mA max
1.8V
1A rms,? max
Switching
Switch
Linear
Current flow
Signal
Device

Power Sequence ：




+MVDD
+VDDC
+3.3V


P_G_EN_10
+1V
+1.8V
+5V
+12V_BUS