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MS-7267

Version 3.0

CPU:

Intel Prescott (L2=2MB) - 3.4G & Above
 Intel Cendar Mill (65nm) - 3.73G & Above
 Intel Smithfield (90nm Dual core)
 Intel Conroe (65W Dual core)

System Chipset:

Intel Lakeport - GMCH (North Bridge)
 Intel ICH7R (South Bridge)

On Board Chipset:

BIOS -- FWH EEPROM
 Azalia -- ALC883
 LPC Super I/O -- W83627D(E)HG
 LAN-- REALTEK RTL8100C Co-lay RTL8110SB\SC
 CLOCK -- ICS954519

Main Memory:

DDR II *2 (Max 2GB)

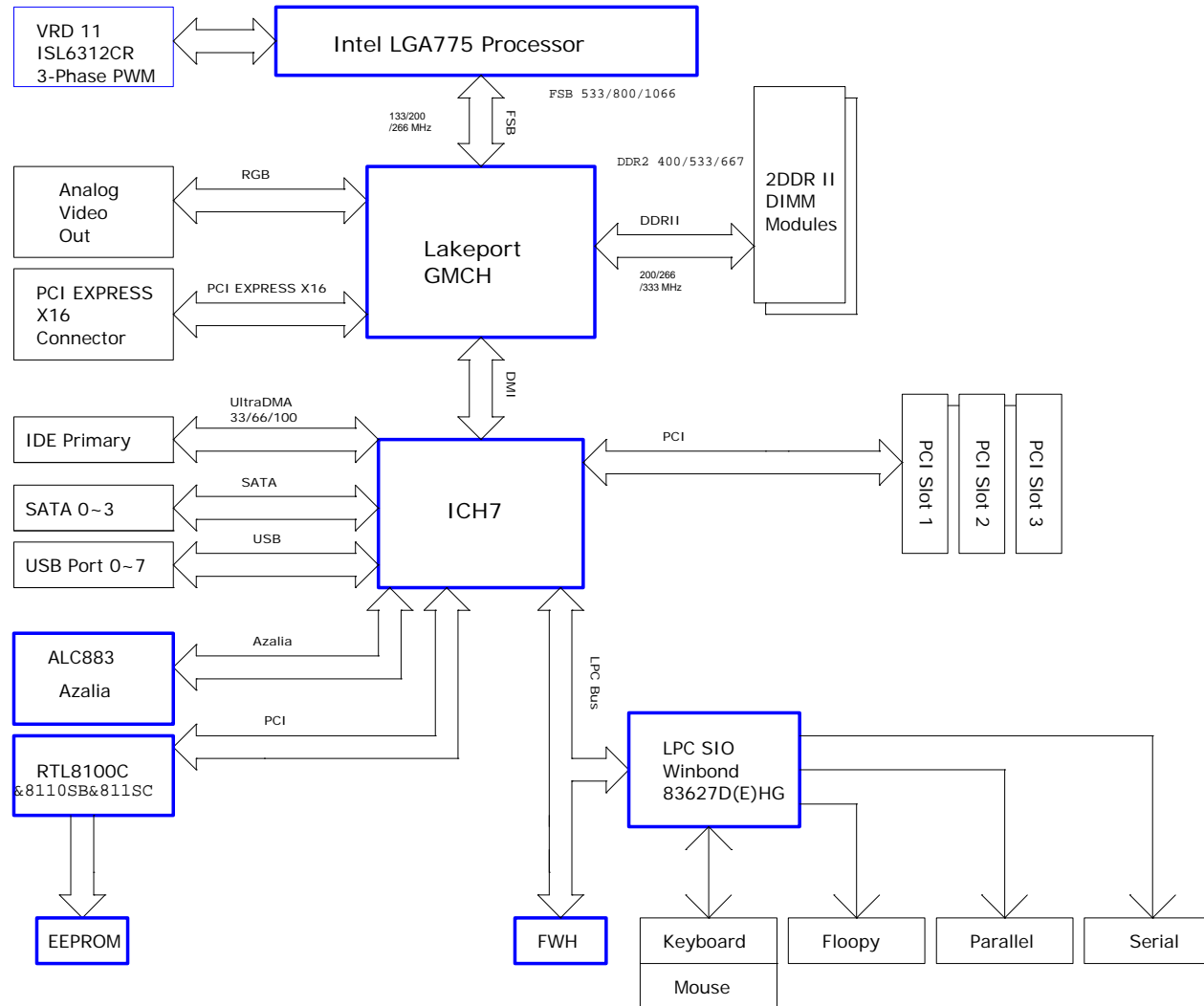
Expansion Slots:

PCI 2.3 SLOT * 3
 PCI EXPRESS X16 SLOT

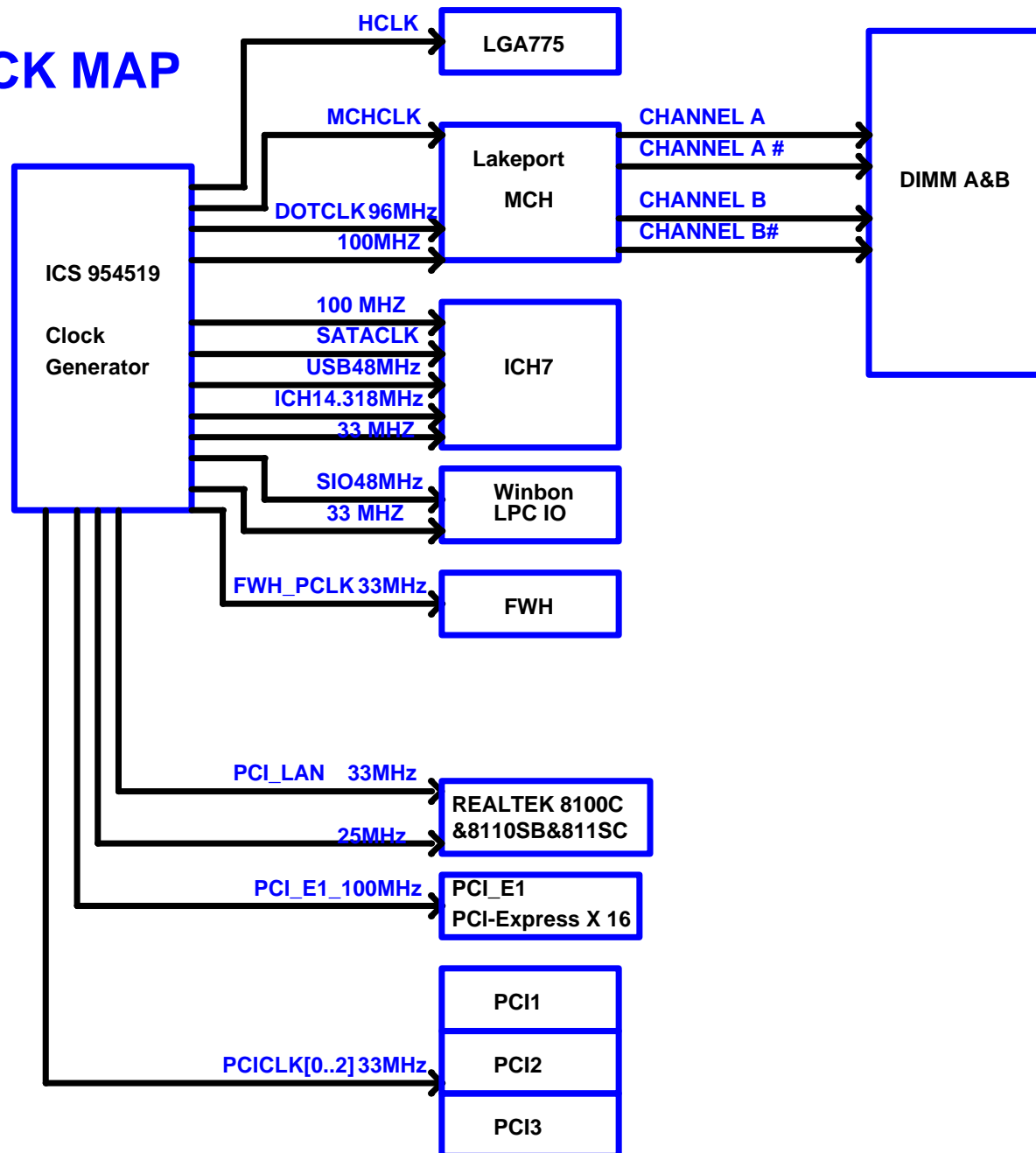
PWM:

Controller: ISL6312CR 3 PHASES

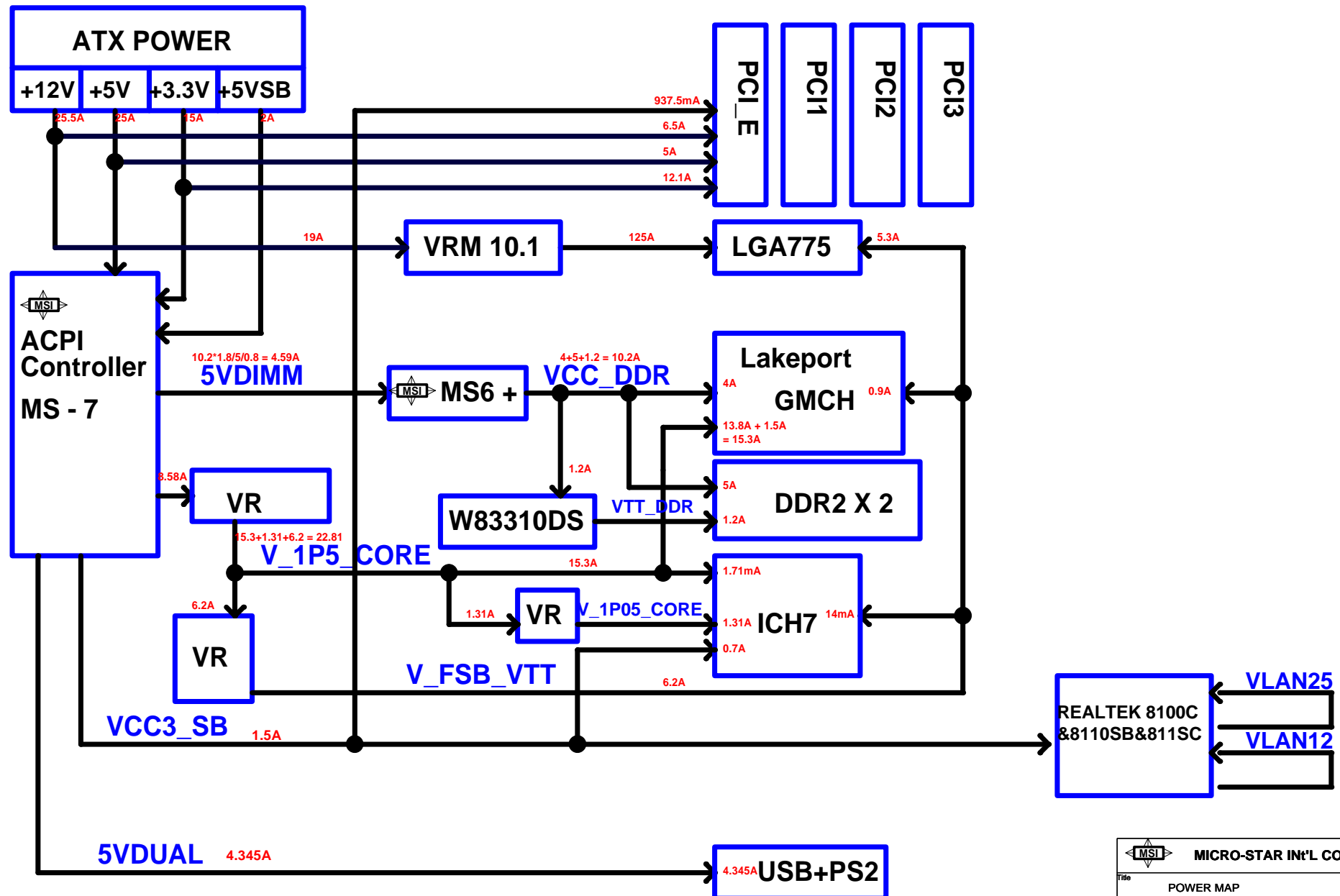
Block Diagram



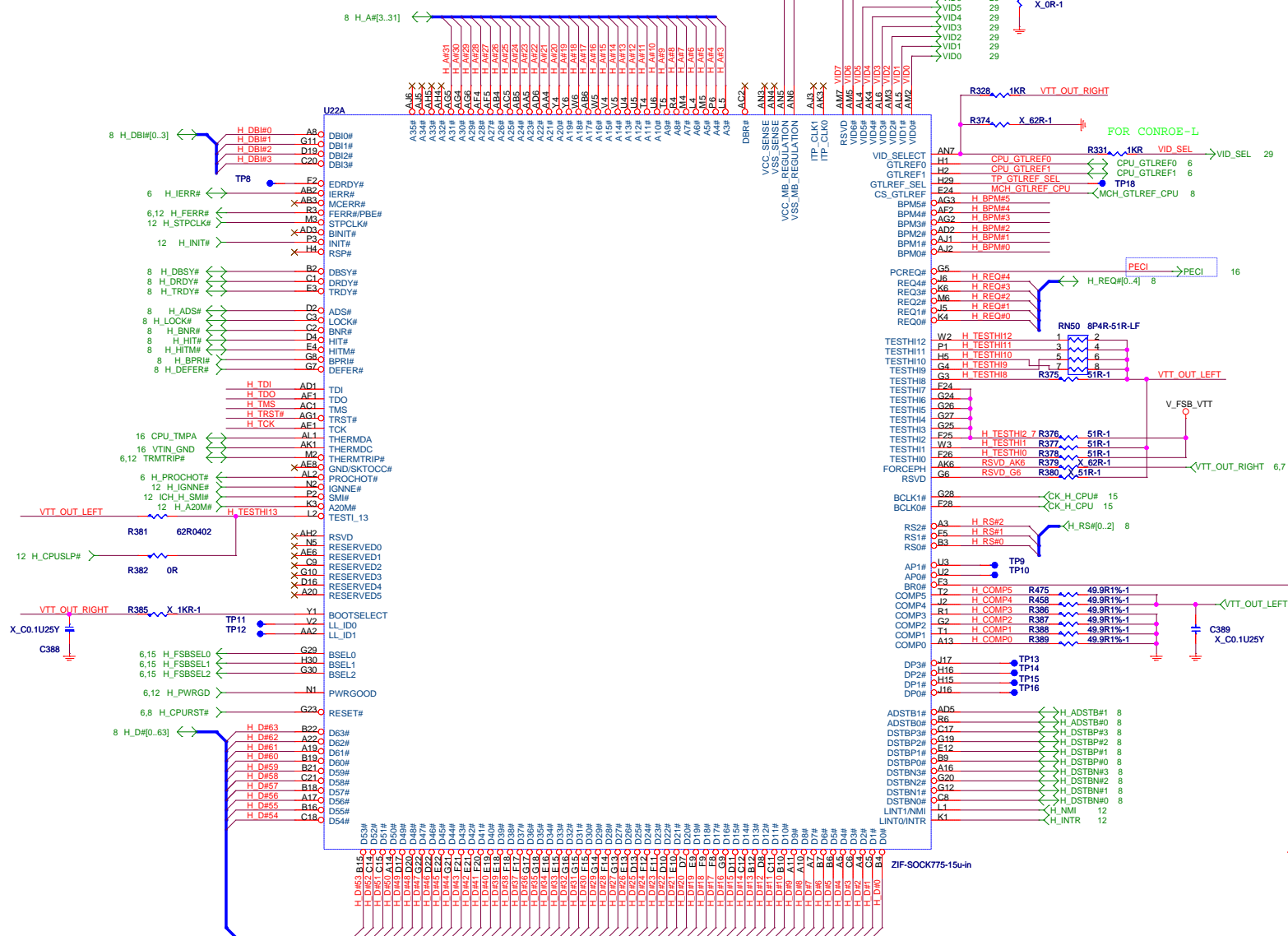
CLOCK MAP



POWER MAP

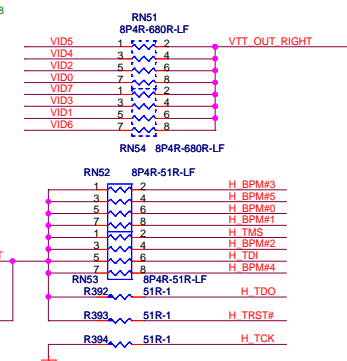


CPU SIGNAL BLOCK

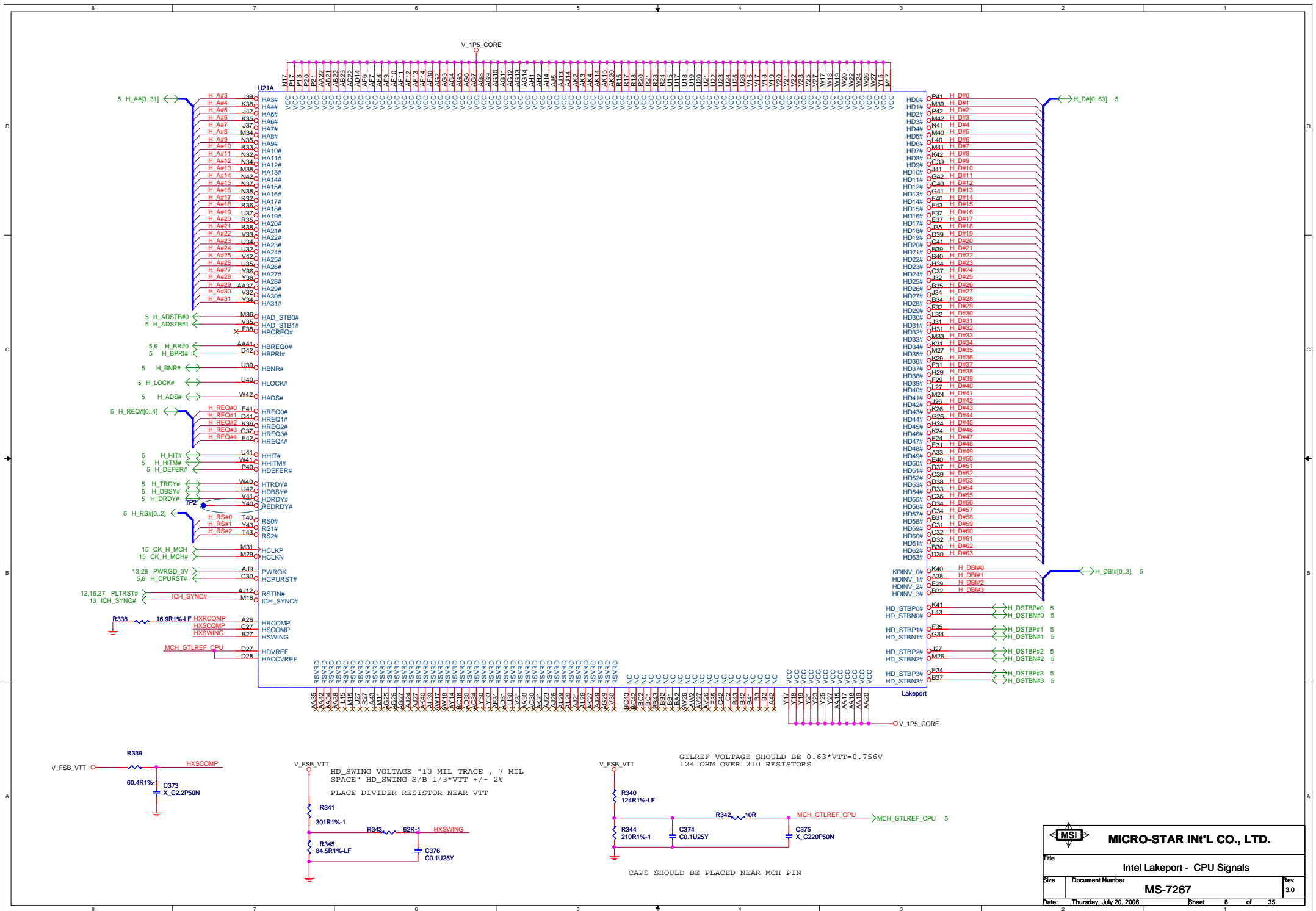


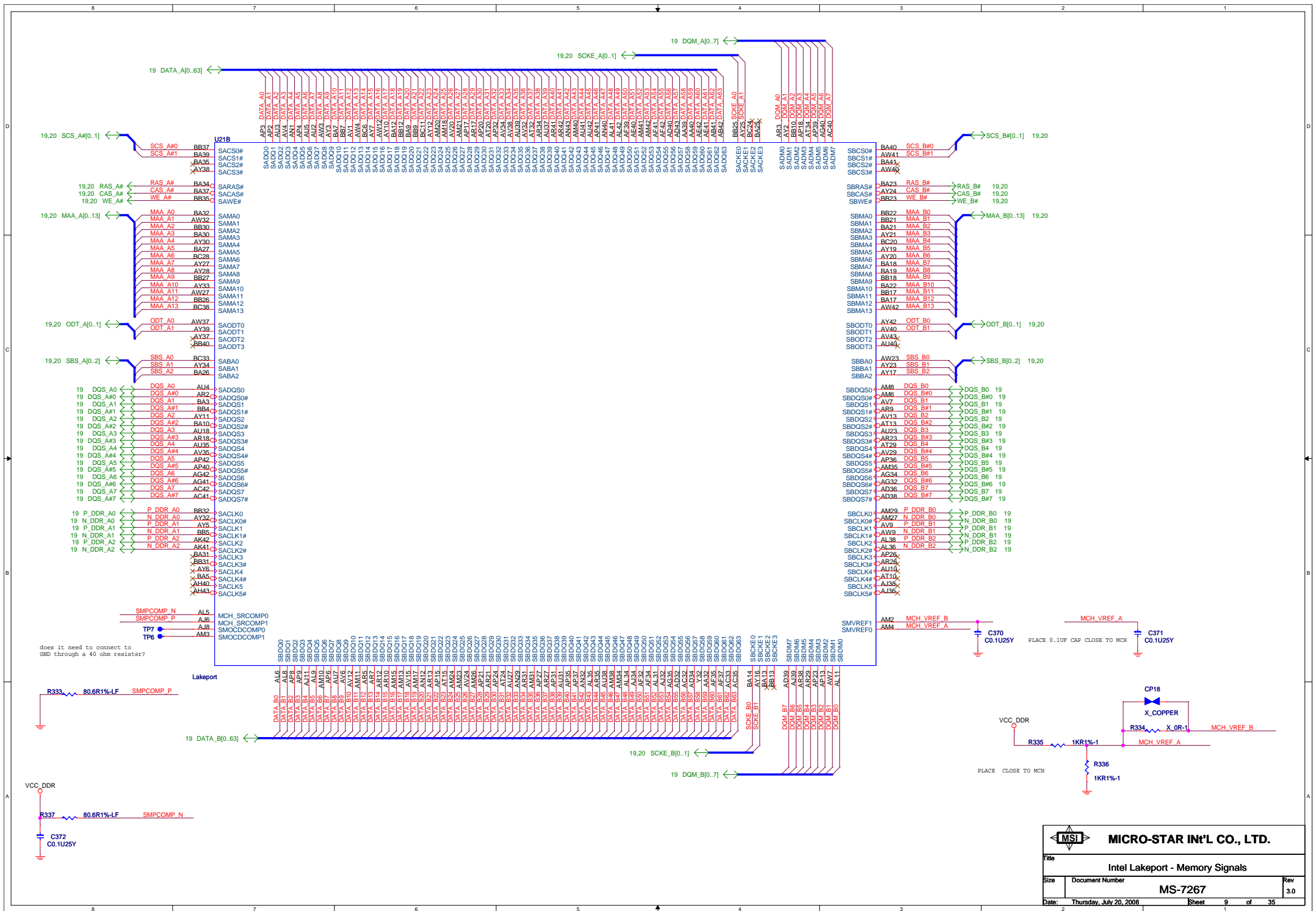
BSEL			TABLE
2	1	0	FSB FREQUENCY
0	0	0	266 MHZ (1066)
0	1	0	200 MHZ (800)
0	0	1	133 MHZ (533)

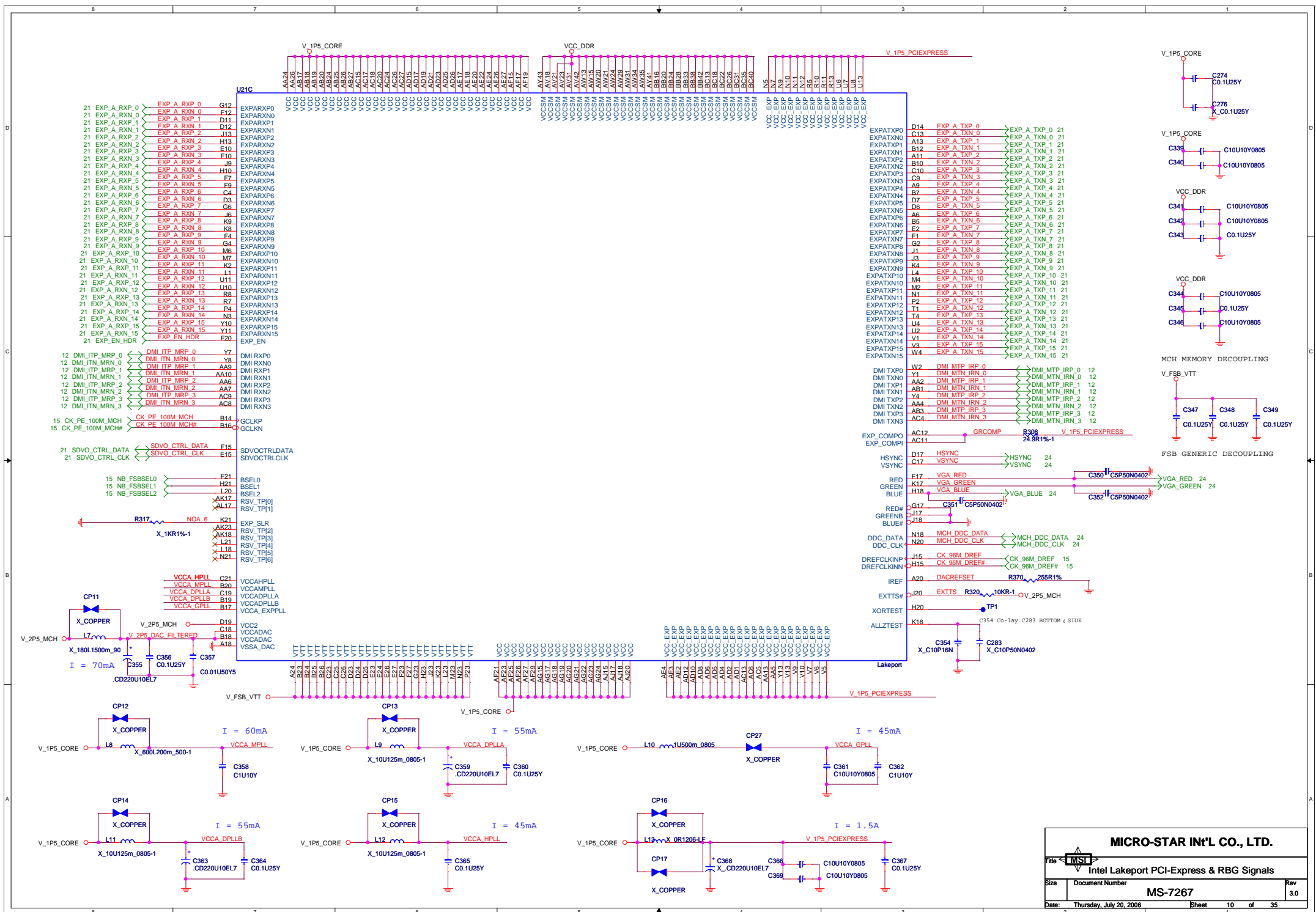
```
Prescott / Cedar Mill
LL_ID[1:0] = 00
GTLREF_SEL = 0
VTT_SEL = 1
```

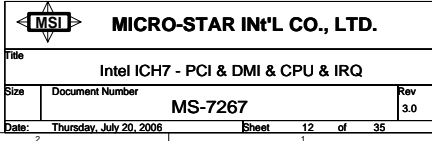


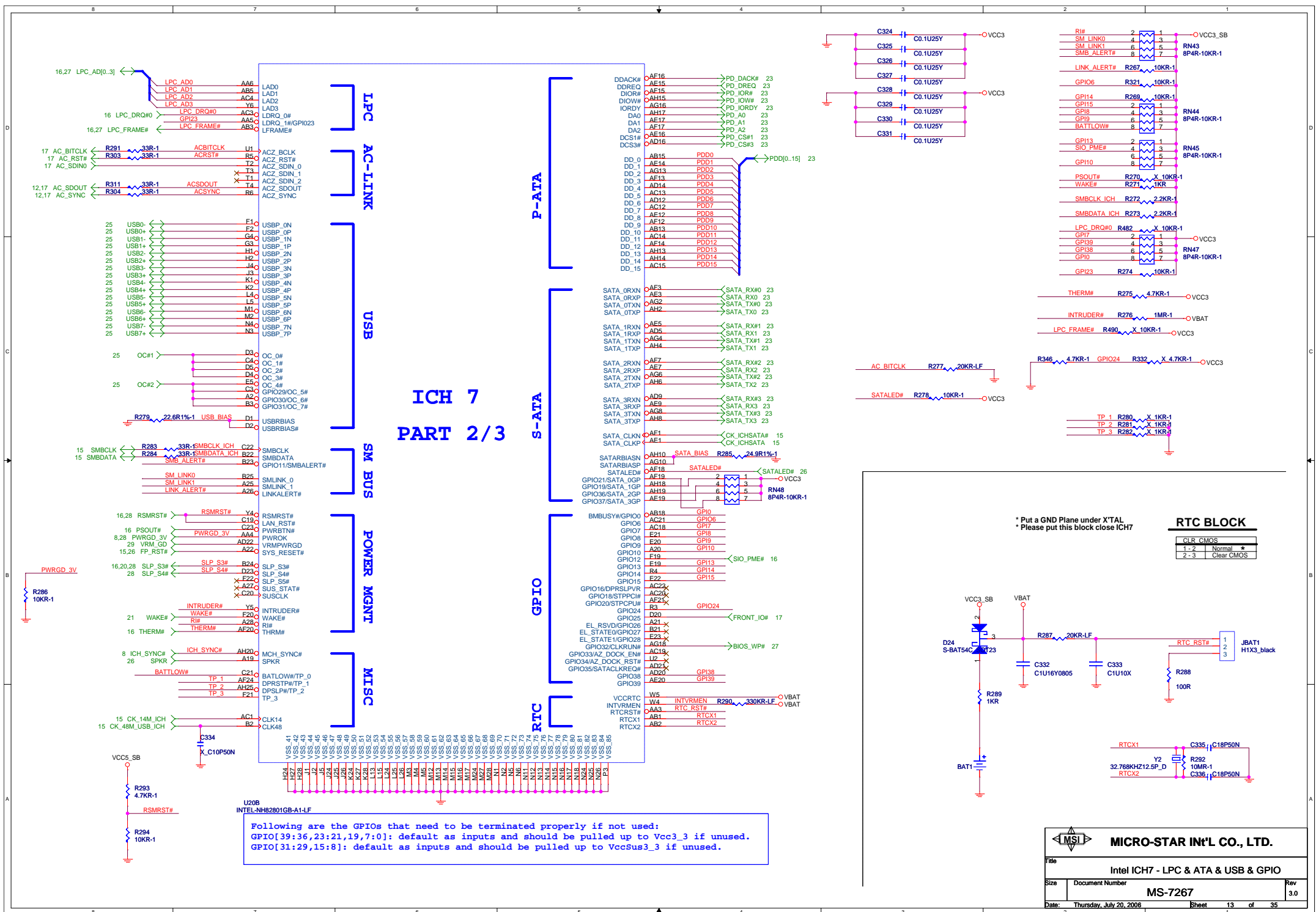
PLACE BPM/TCK/TDI/TMS TERMINATION NEAR CPU
PLACE TDO TERMINATION NEAR CONNECTOR





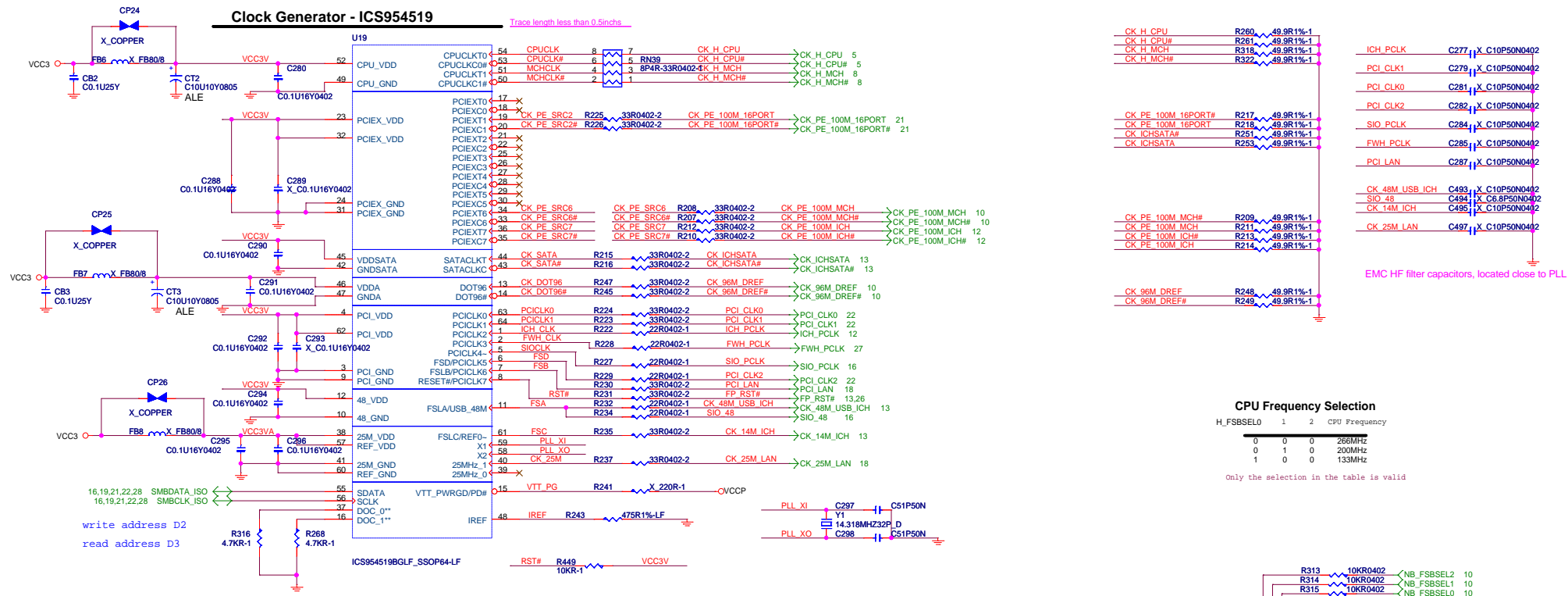




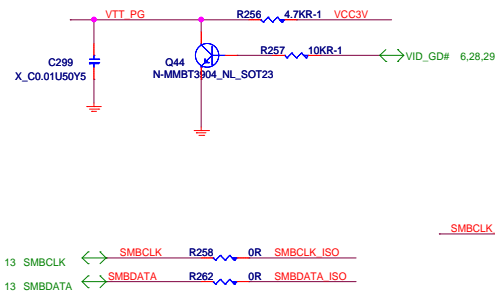


Clock Generator - ICS954519

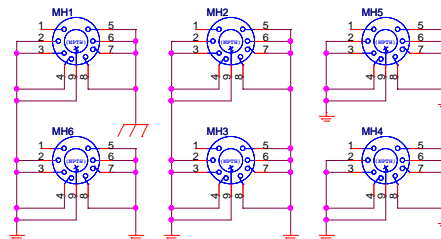
Trace length less than 0.5inches



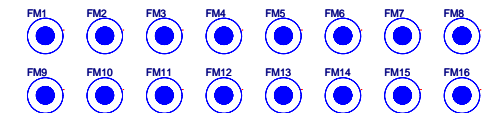
Clock Generator VTT PowerGood



Mounting Holes

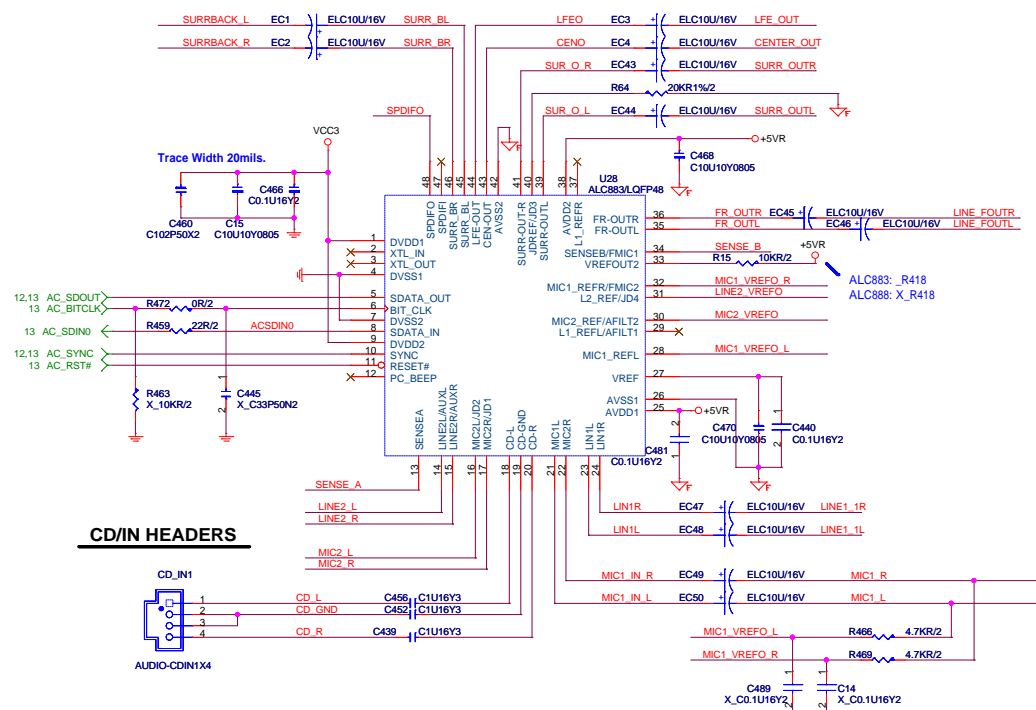


Optics Orientation Holes

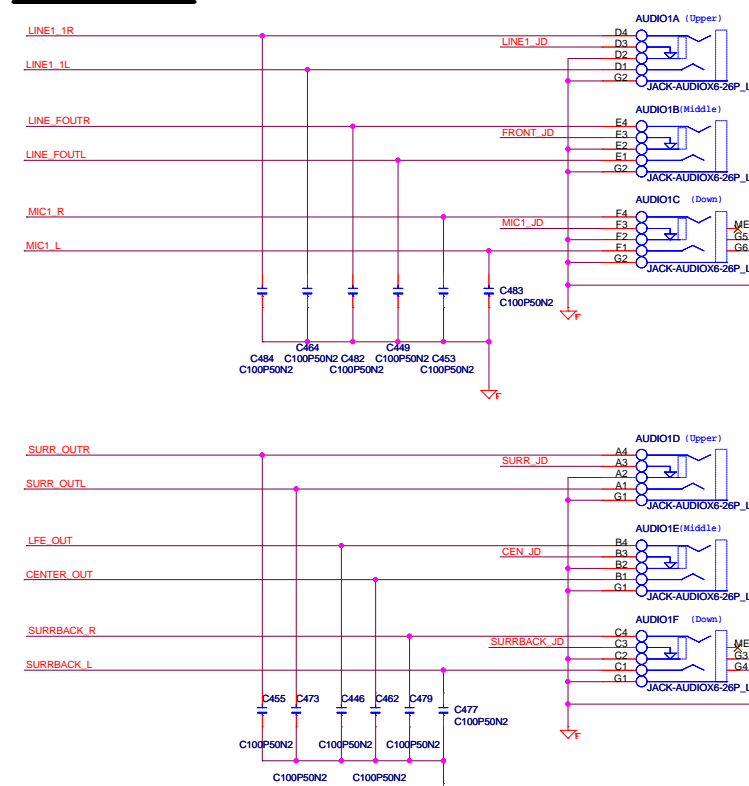


Title: Clock - ICS954519		
Size:	Document Number:	Rev:
	MS-7267	3.0
Date:	Thursday, July 20, 2006	Sheet 15 of 35

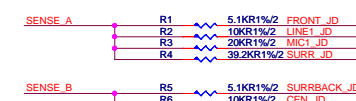
ALC883 CODEC



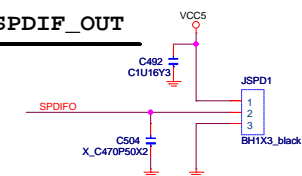
ALC883 JACK



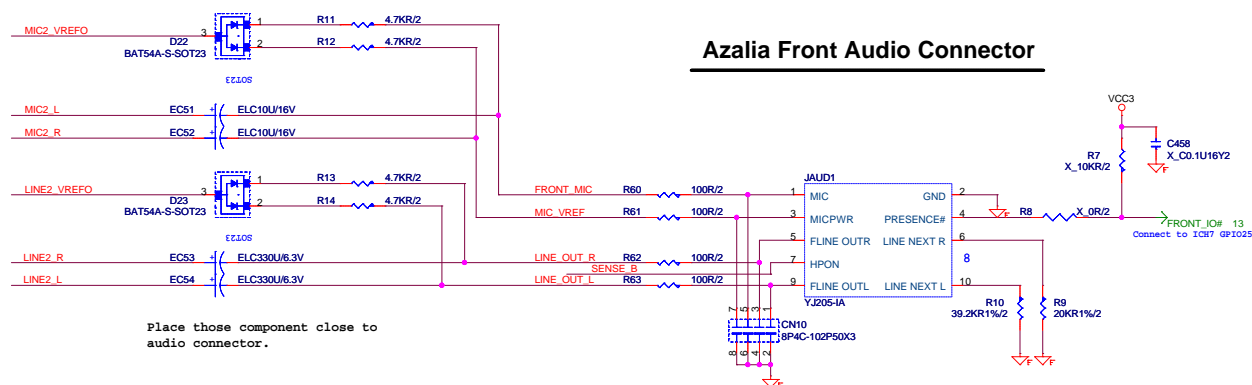
ALC883 JACK DETECT



SPDIF OUT

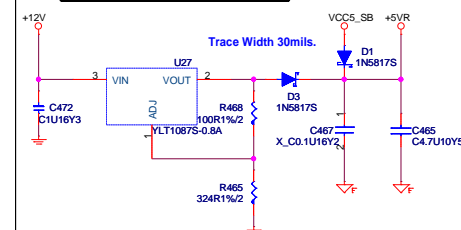


Azalia Front Audio Connector

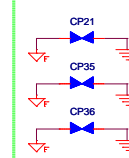


Place those component close to
audio connector.

AUDIO CODE REGULATORS



For EMI



MICRO-STAR INT'L CO.,LTD

MS-7267

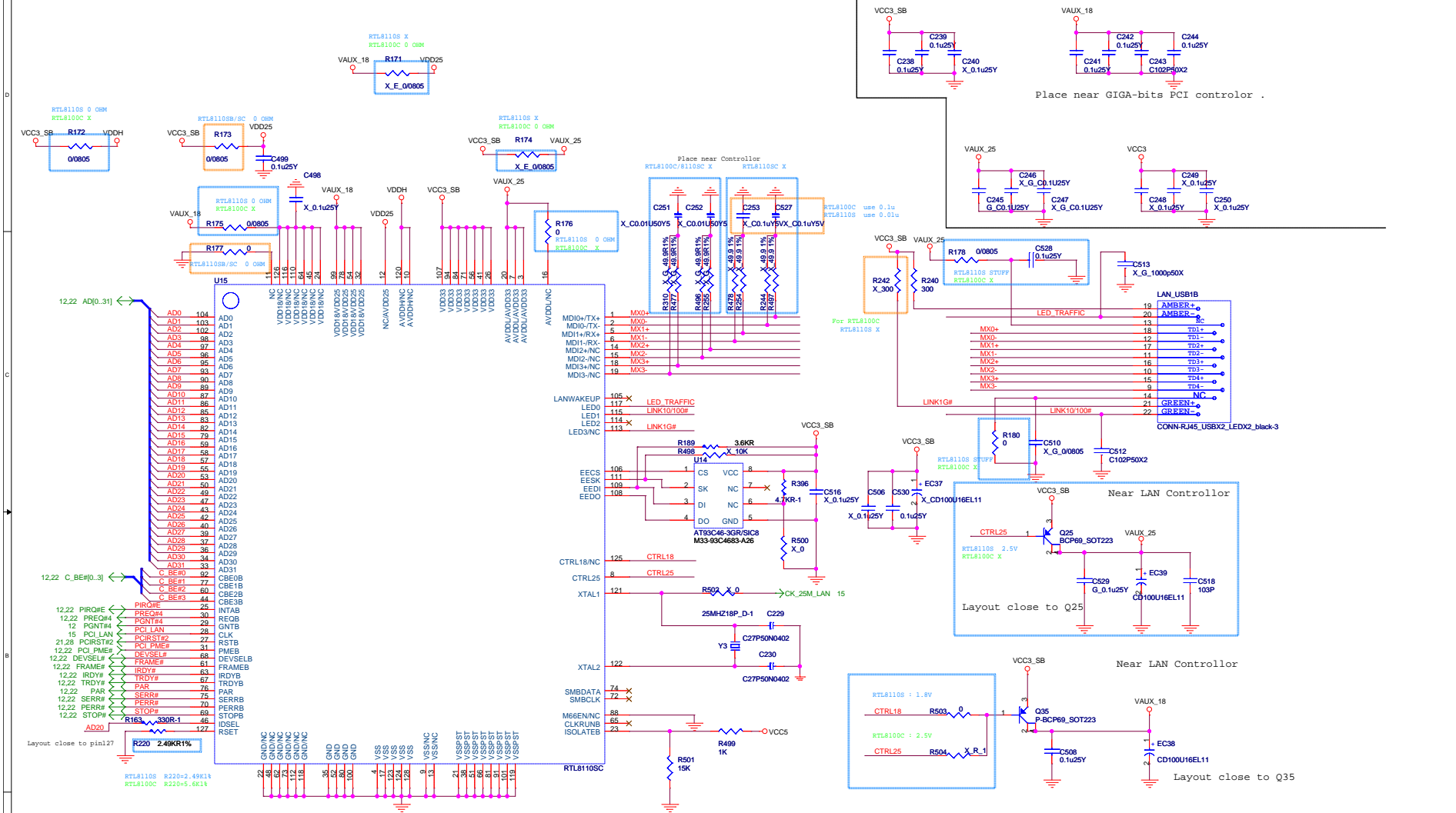
Product Description

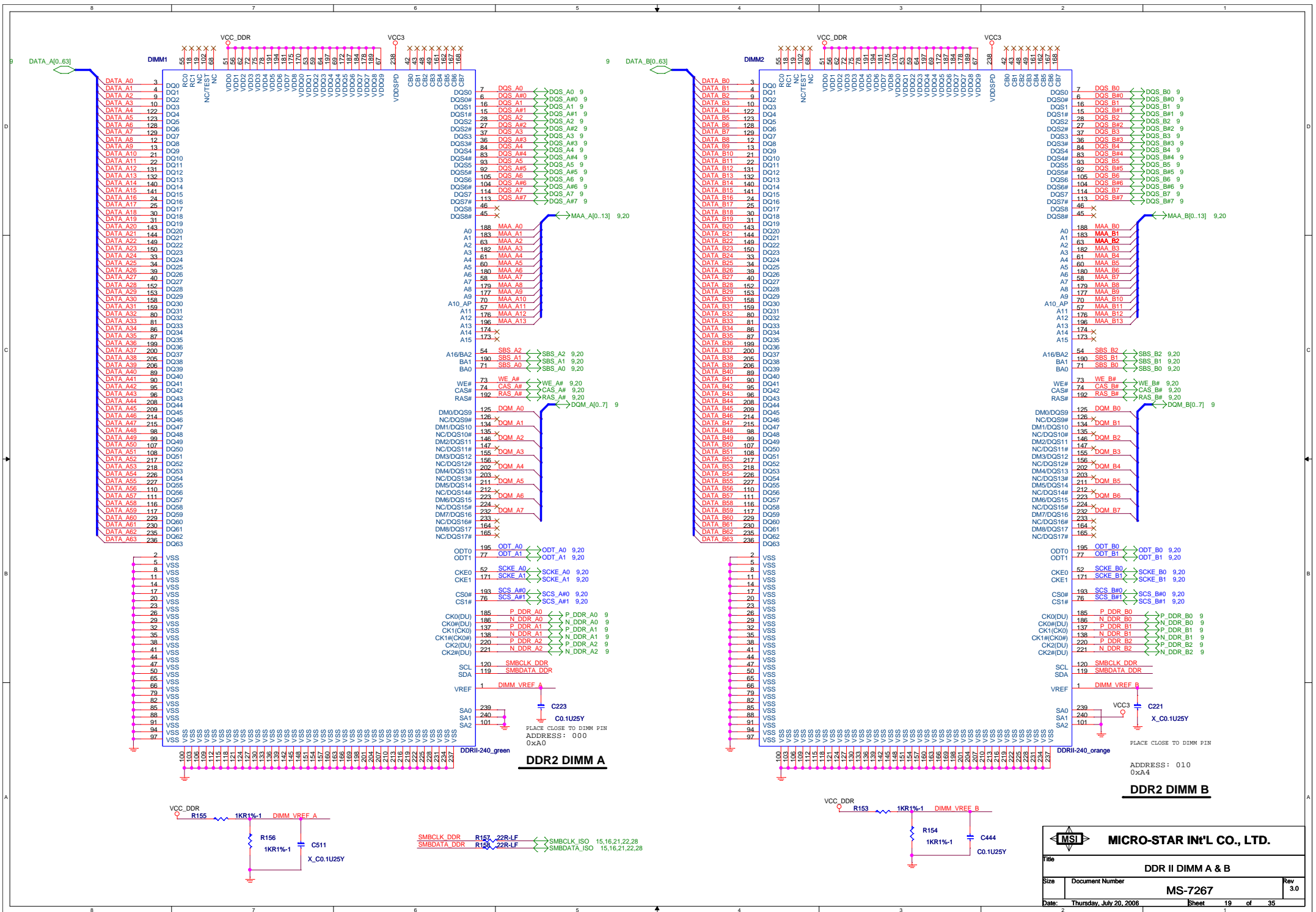
Azalia CODEC(ALC883)

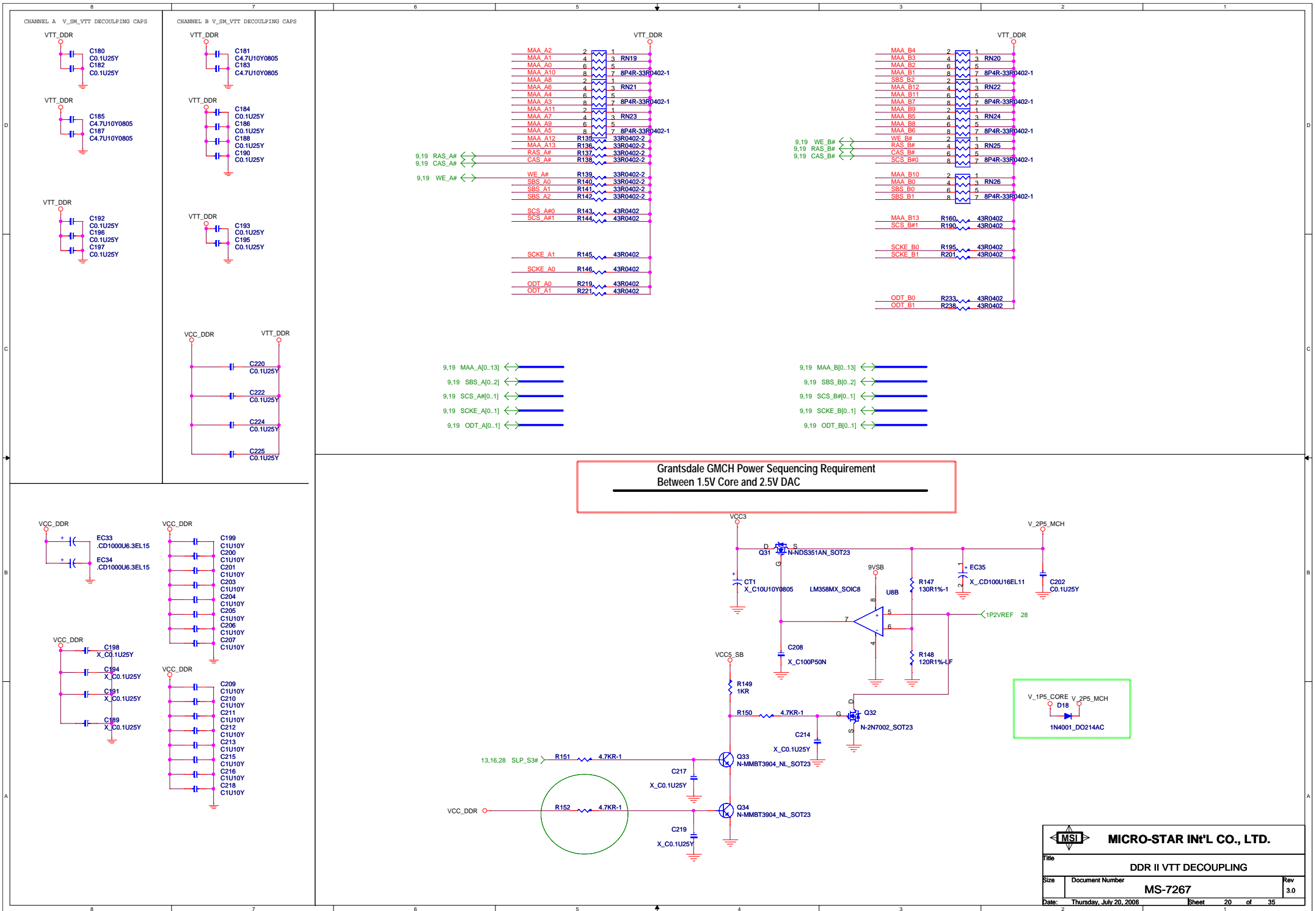
Date: Thursday, July 20, 2006

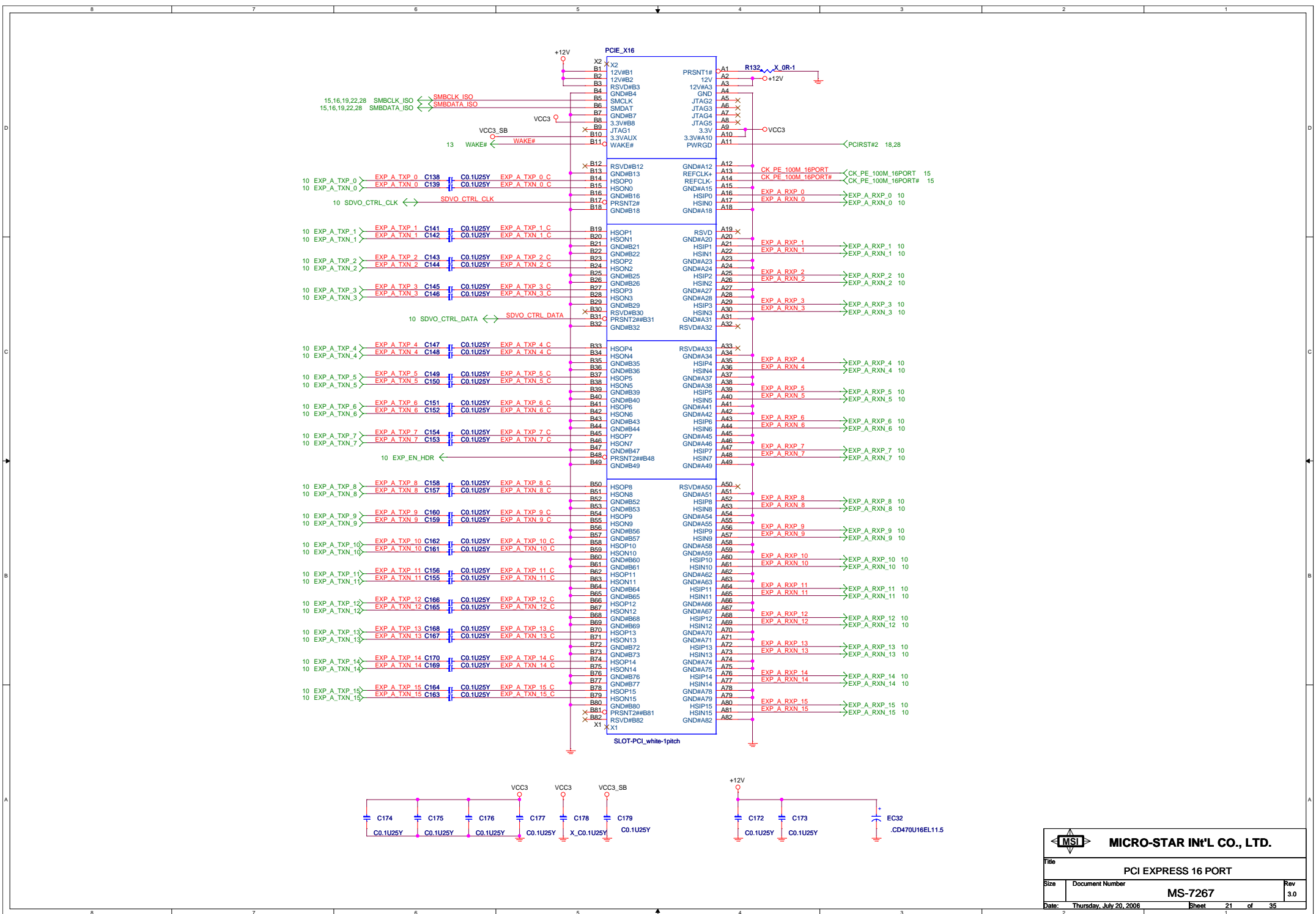
Sheet 17 of 35

BOM Default: 8110SC





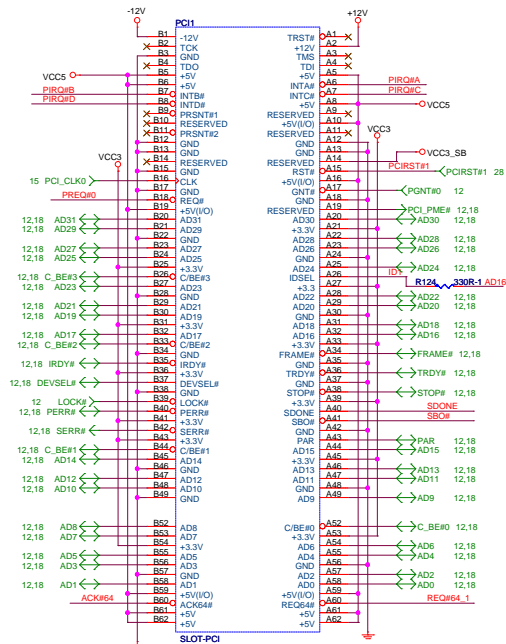




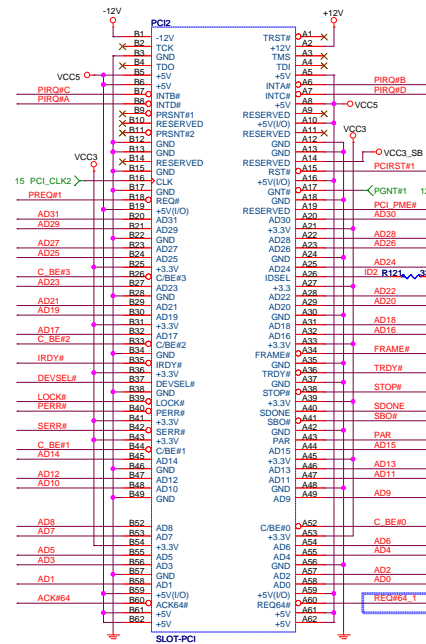
PCI SLOT 1 (PCI VER: 2.2 COMPLY)

PCI SLOT 2 (PCI VER: 2.2 COMPLY)

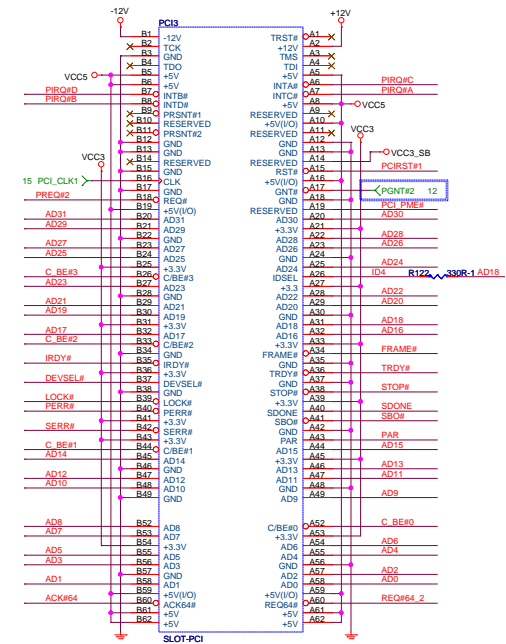
PCI SLOT 3 (PCI VER: 2.2 COMPLY)



IDSEL = AD16
MASTER = PREQ#0
PIRQ#A

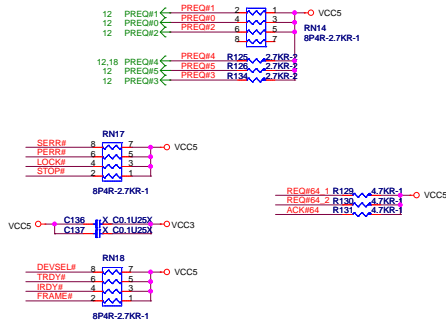


IDSEL = AD17
MASTER = PREQ#1
PIRQ#B

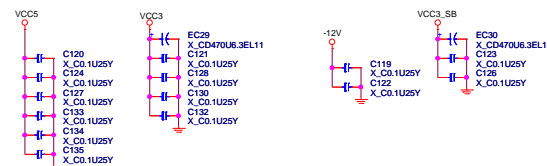


IDSEL = AD18
MASTER = PREQ#2
PIRQ#C

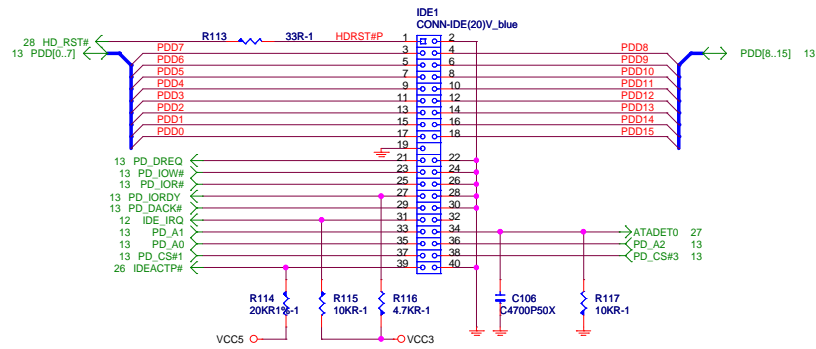
PCI PULL-UP / DOWN RESISTORS



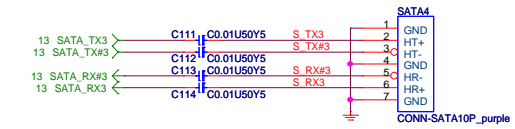
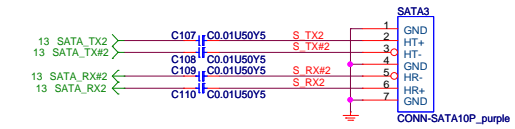
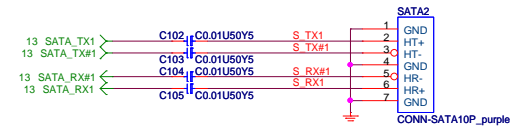
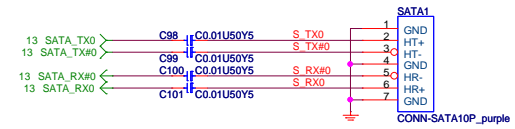
PCI SLOT DECOUPLING CAPACITORS



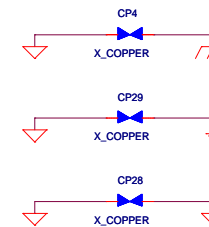
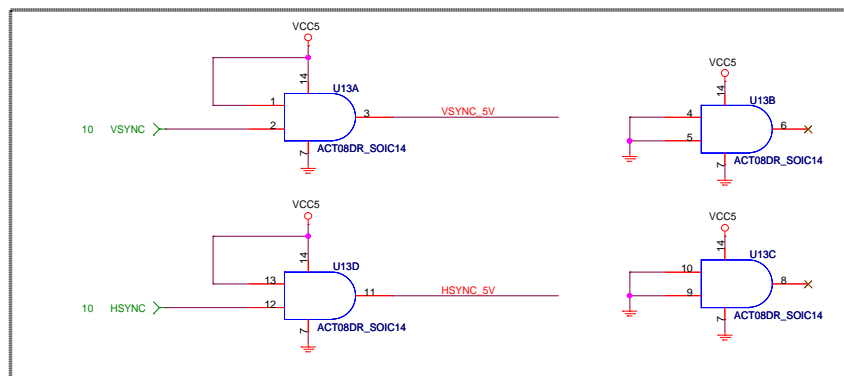
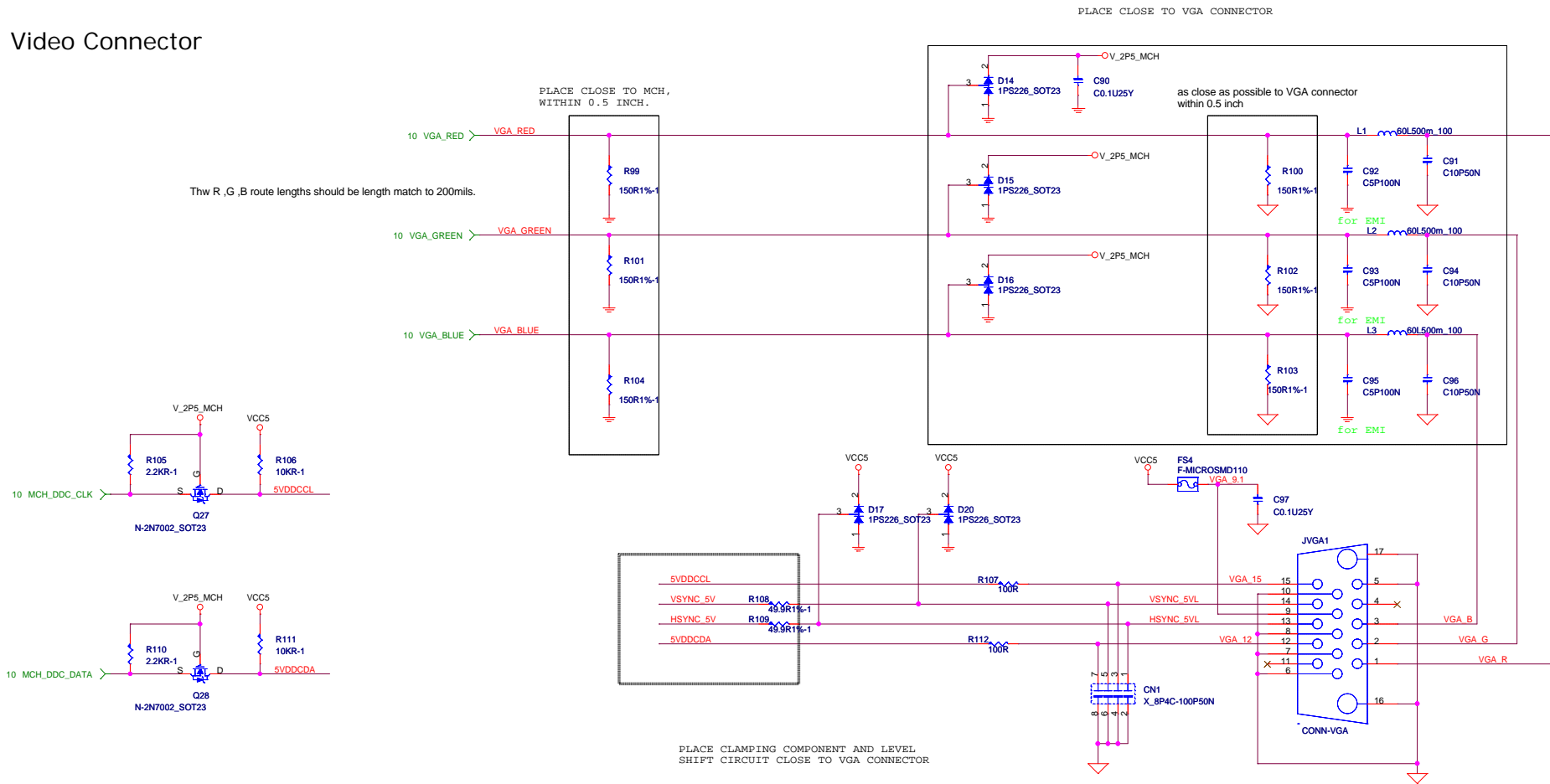
ATA 33/66/100 IDE Connectors



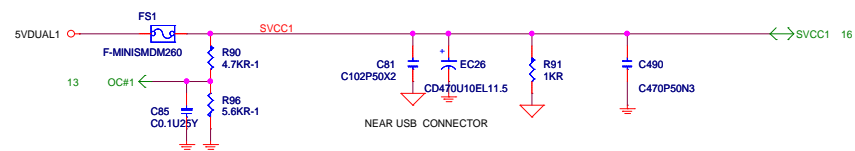
SERIAL ATA CONNECTOR BLOCK



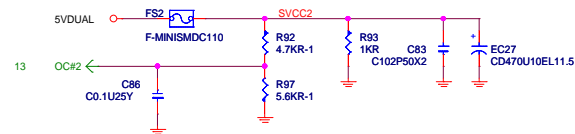
Video Connector



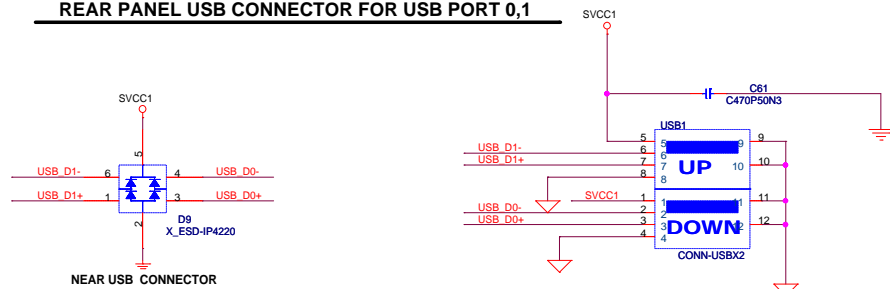
POWER CIRCUIT FOR USB PORT 0,1,2,3 (REAR)



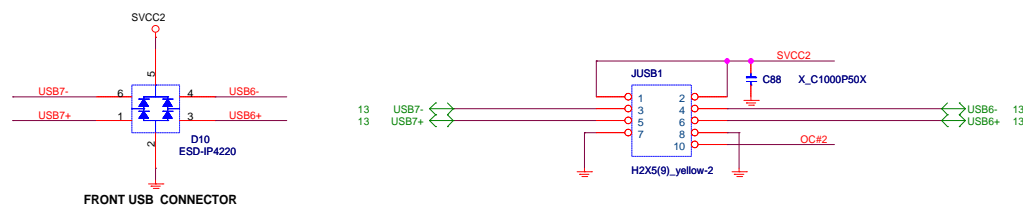
POWER CIRCUIT FOR USB PORT (FRONT)



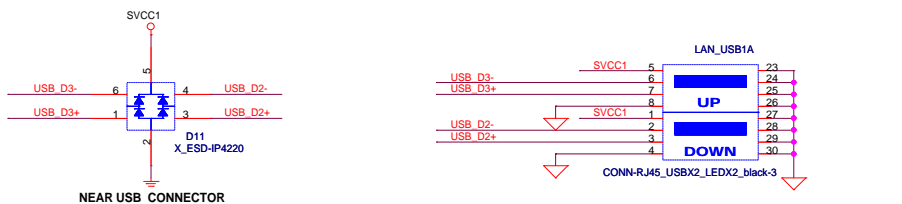
REAR PANEL USB CONNECTOR FOR USB PORT 0,1



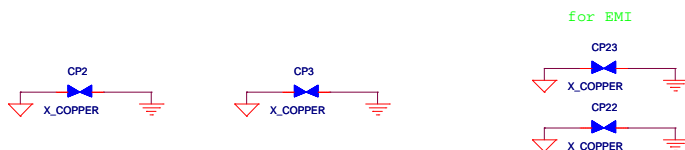
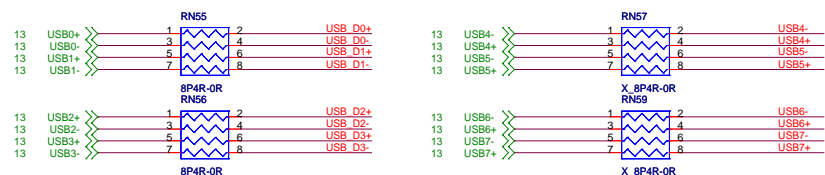
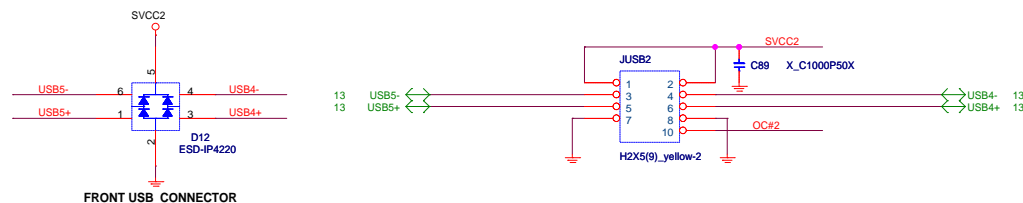
FRONT PANEL USB CONNECTOR FOR USB PORT 6,7



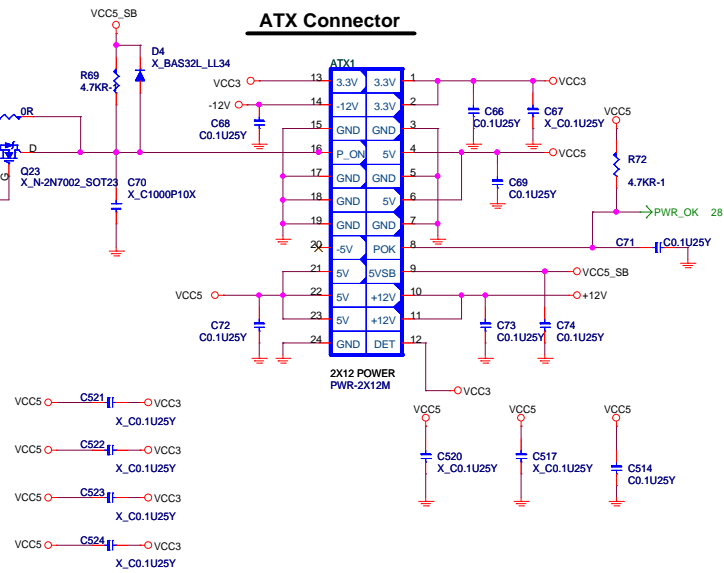
REAR PANEL USB CONNECTOR FOR USB PORT 2,3



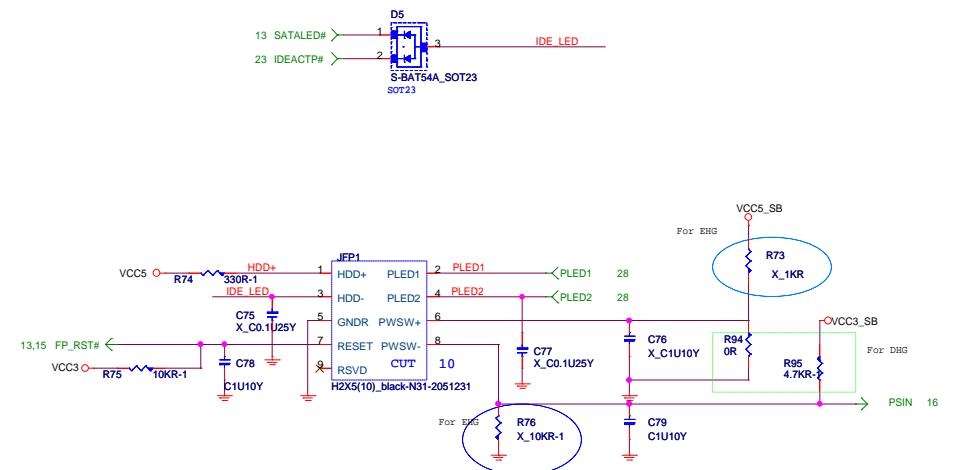
FRONT PANEL USB CONNECTOR FOR USB PORT 4,5



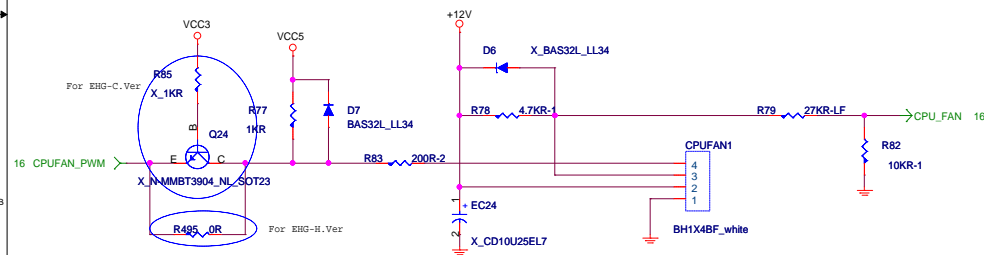
ATX Connector



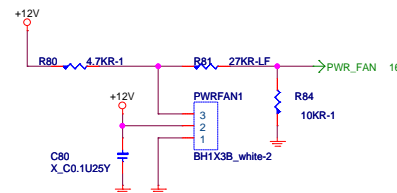
INTEL/PB Front Panel Connector



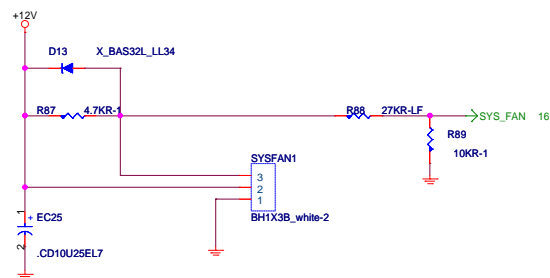
CPU FAN



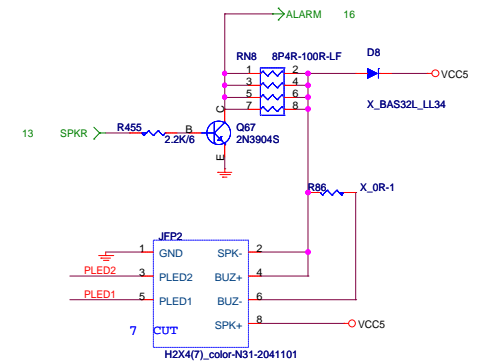
PWR FAN



SYSTEM FAN

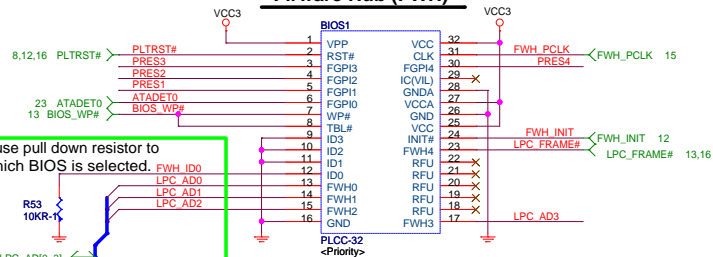


MSI Front Panel Connector



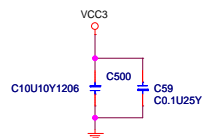
13,16 LPC_AD[0..3]

Firmware Hub (FWH)

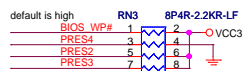


FWH DECOUPLING CAPACITORS

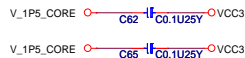
Place Cap. as Close to FWH< 350 mil



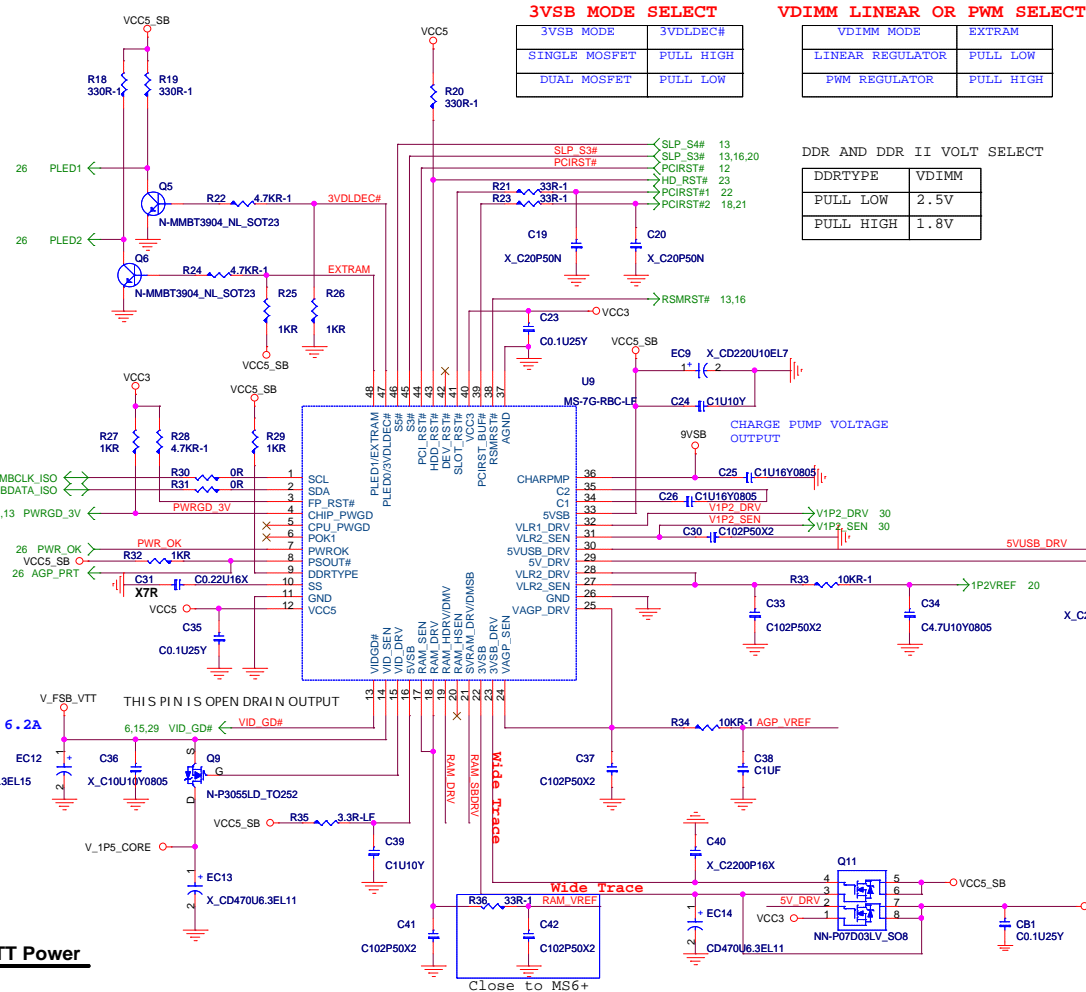
FWH Resistors



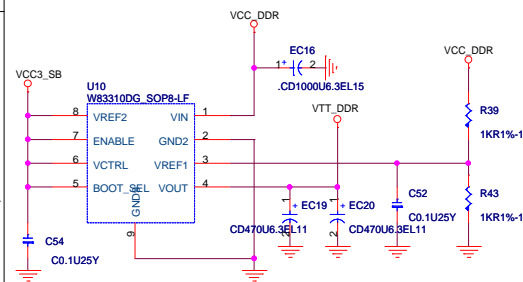
FOR EMI



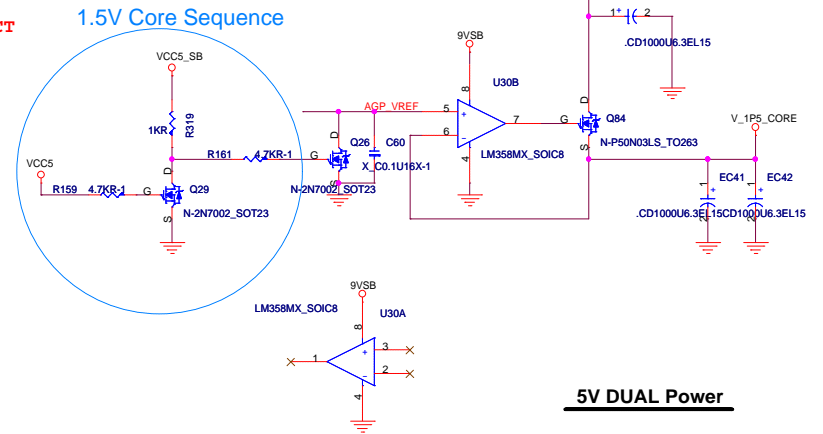
ACPI Controller



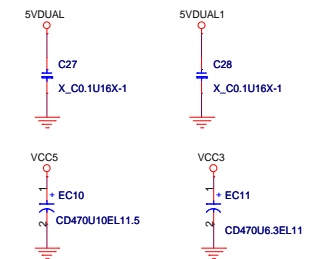
DDR VTT Power



AGP POWER



5V DUAL Power



SWITCH:
D03-40N030B-A36
D03-20N030B-I14
D03-45N030B-P03
Regulator (TO-252)
D03-45N020B-N03
D03-40N030B-A36
D03-6530A0B-F01
Regulator (TO-263)
D03-50N034B-N03
D03-50N031B-P03
Dual NMOS
D03-07D0303-N03
D03-0731303-A30

