

# IH61W-MHS

REV 8.0

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25	AUDIO CONNECTOR
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34	LINEAR POWER
35	MEMORY DC-DC Conver
36	VTT DC-DC Conver
37	VCORE VREG1
38	VCORE VREG2
39	OVER VOLTAGE
40	BOM

## CPU:

Intel Sandy/Ivy Bridge processors in LGA1155 Package 95W

## System Chipset:

Cugar Point H61

## Main Memory:

Dual Channel/DDR- III\* 2(Max 16GB) 1066/1333

DDR3- 1600 /1333 /1066 /800

## Onboard Device:

Super I/O:IT8772E

LAN:Atheros AR8152

HD Codec:VIA VT1708S 3 jacks

## Power solution:

CPU Voltage Regulators:2phase by ISL6363

AXG voltage Regulators:1phase by ISL6363

VTT voltage Regulators:1Phase by FP6326

DDR voltage Regulators:1Phase by FP6326

## Expansion Slots:

PCI EXPRESS 16X SLOT\* 1

PCI EXPRESS 1X SLOT\* 1

## REAR IO:

PS/2 KB/MS

VGA

2 layer USB2.0 Ports

2 layer USB2.0 + RJ- 45 Ports

Audio Jackets

## Front I/O:

SATA2 \* 4

USB Header \* 2

CPU /System1

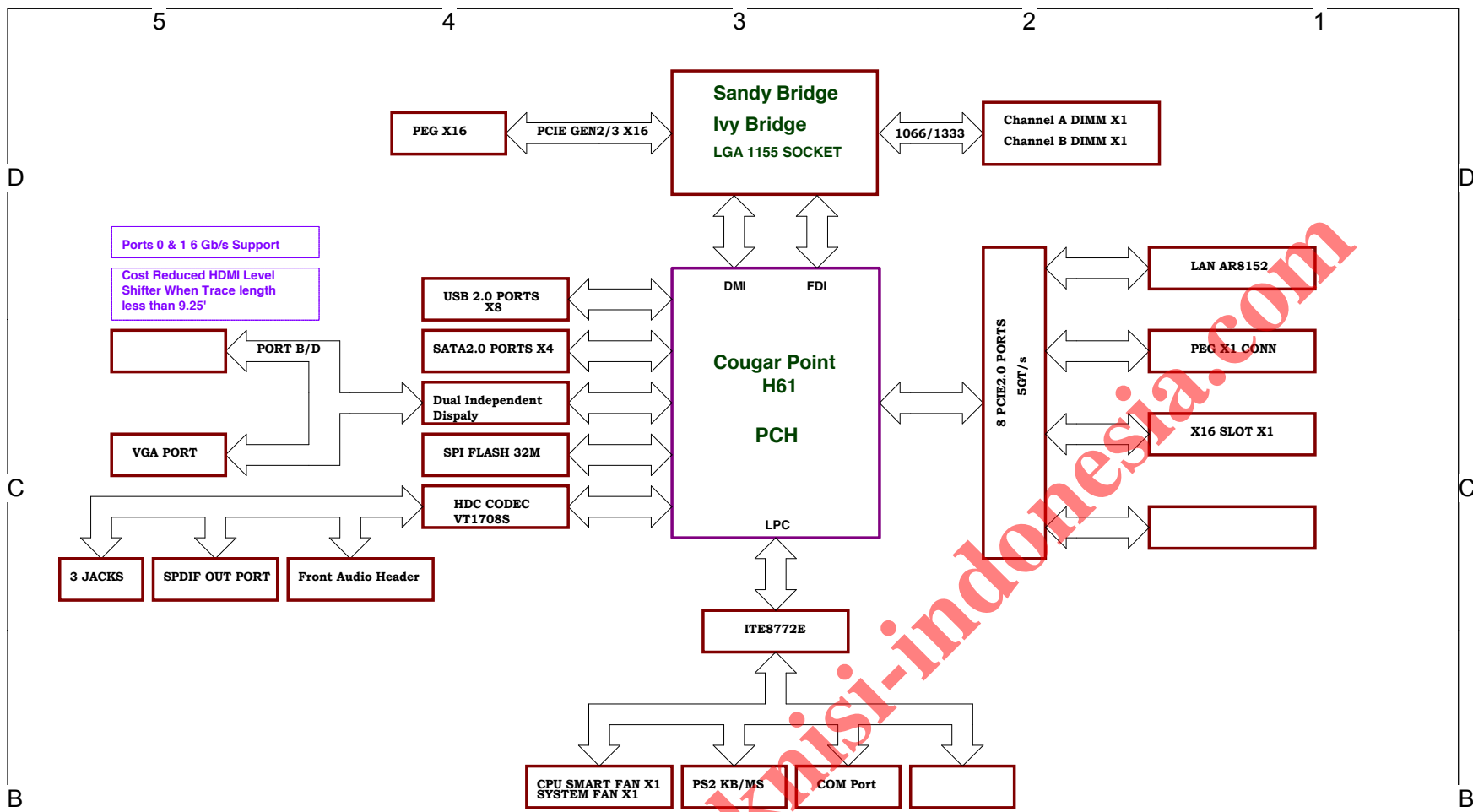
Front Audio Header

COM1

HW Engineer	ELI	Date	2011/ 03/ 08
HW Leader1	Cobra	Date	
HW Leader2	Belle	Date	

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Feature Set	SKU Name(s)					
	Q67	Q65	B65	H67	P67	H61
PCI Express* 2.0 Ports	8	8	8	8	8	6 <sup>9</sup>
PCI Interface	Yes	Yes	Yes	No <sup>10</sup>	No <sup>10</sup>	No <sup>10</sup>
USB 2.0 Ports	14	14	12 <sup>6</sup>	14	14	10 <sup>7</sup>
Total number of SATA ports	6	6	6	6	6	4
• SATA Ports (6 Gb/s, 3 Gb/s, and 1.5 Gb/s)	2 <sup>1</sup>	1 <sup>5</sup>	1 <sup>5</sup>	2 <sup>5</sup>	2 <sup>1</sup>	0
• SATA Ports (3 Gb/s and 1.5 Gb/s only)	4	5	5	4	4	4 <sup>8</sup>
HDMI/DVI/VGA/DisplayPort*/eDP*	Yes	Yes	Yes	Yes	No	Yes
Integrated Graphics Support with PAVP	Yes	Yes	Yes	Yes	No	Yes
Intel® Rapid Storage Technology	AHCI	Yes	Yes	Yes	Yes	No
	RAID 0/1/5/10 Support	Yes	No	No	Yes	No
Intel® AT	Yes	Yes	No	No	No	No
Intel® AMT 7.0	Yes	No	No	No	No	No
Intel® Remote PC Assist Technology - Proactive	Yes	No	Yes	No	No	No
Intel® Remote PC Assist Technology - Reactive	No	No	Yes	Yes	No	No


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**BLOCK DIAGRAM**

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Change from IH61N-MHS 6.1:

1. Remove S3
2. Remove DVI
3. Remove PCI-E Slot
4. Remove V\_SA
5. Remove Audio 12v to 5v
6. Change PWM to UP1625Q
7. Change LAN to RTL8105T

Change from 0.7

1. DDR3=1.525V
2. Change LAN to AR8152
3. Change Audio VCC to +5V\_STBY
4. Change Logic VCC to +3v3\_DUAL
5. Change 2N7002 to 3904 for Q27

Change from 0.71

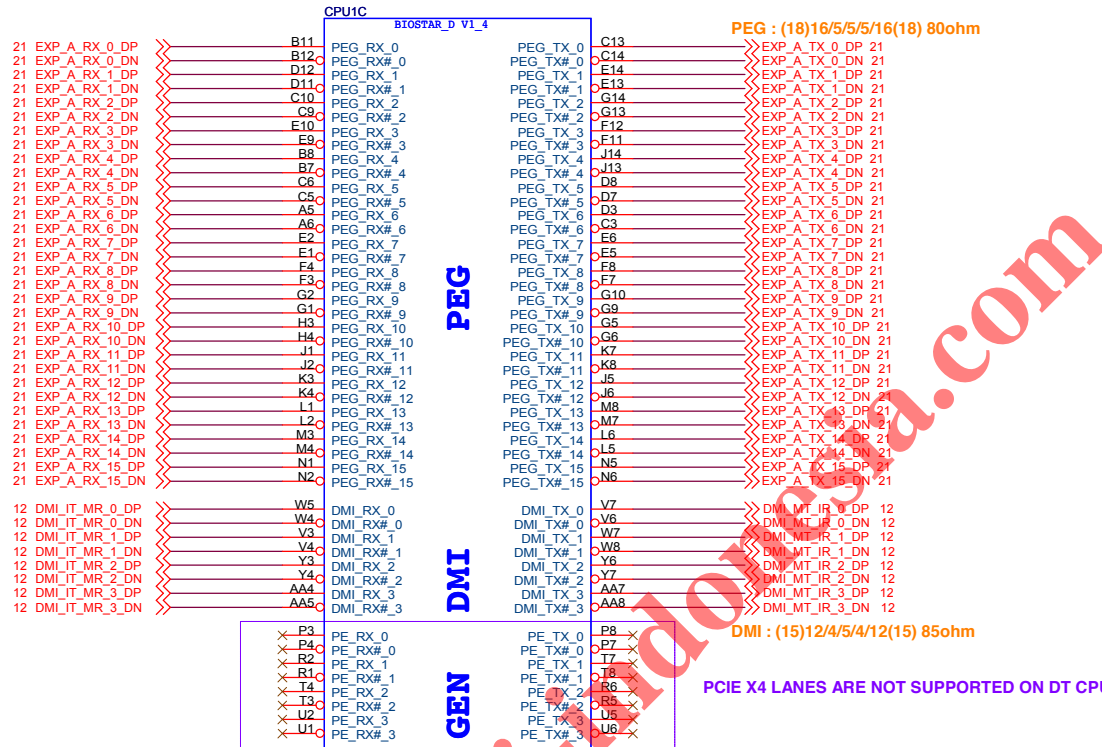
1. Add Model Name
2. Fine tune Eup
3. Fine tune RTC
4. Change low noise CHOKE
5. Add CPU PWM NTC
6. Change DDR voltage to 1.52v
7. Change PCIE16X AC Coupling Capacitor to 0.1uF

Change from 7.0

1. Change ALC662 to VIA1708S
2. Change IT8728 to IT8772
3. Remove CPU PWM Input Choke
4. Remove CPU PWM Low Side Mosfet
5. Remove LPT Header
6. Change UP0105 to az1117 For 3VSB
7. Change PCH Voltage to 1.06V
8. Change +3V3\_STBY to 3.26V

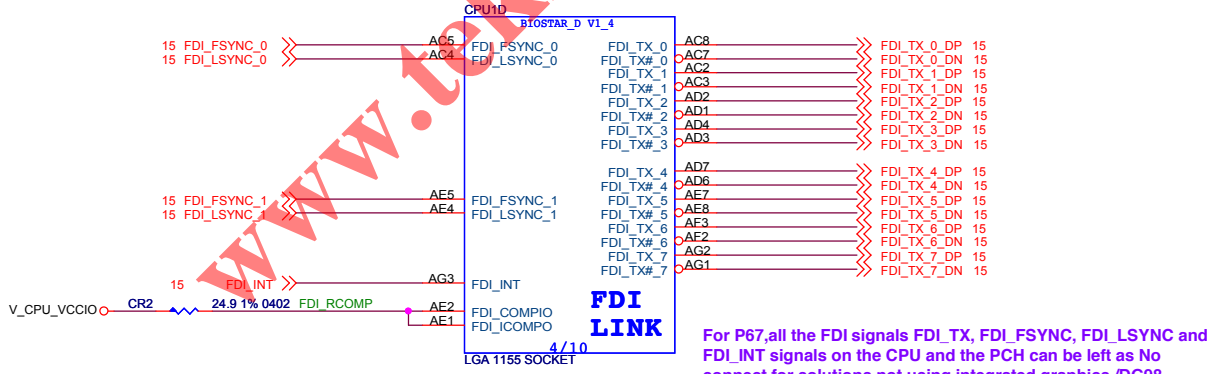
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CHANGE LIST		
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V\_CPU\_VCCIO CR1 24.9 1% 0402 PEG\_RCOMP B5  
PEG\_ICOMPI & PEG\_RCOMP: 4mil /15mil;  
PEG\_ICOMPO : 12mil /15mil  
LESS THAN 500mil  
SHORT B4 & C4 TOGETHER, ROUTE AS A SINGLE 4 MIL TRACE TO R1  
ROUTE B5 TO R1 AS A SEPERATE 10 MIL TRACE

3/10  
LGA 1155 SOCKET

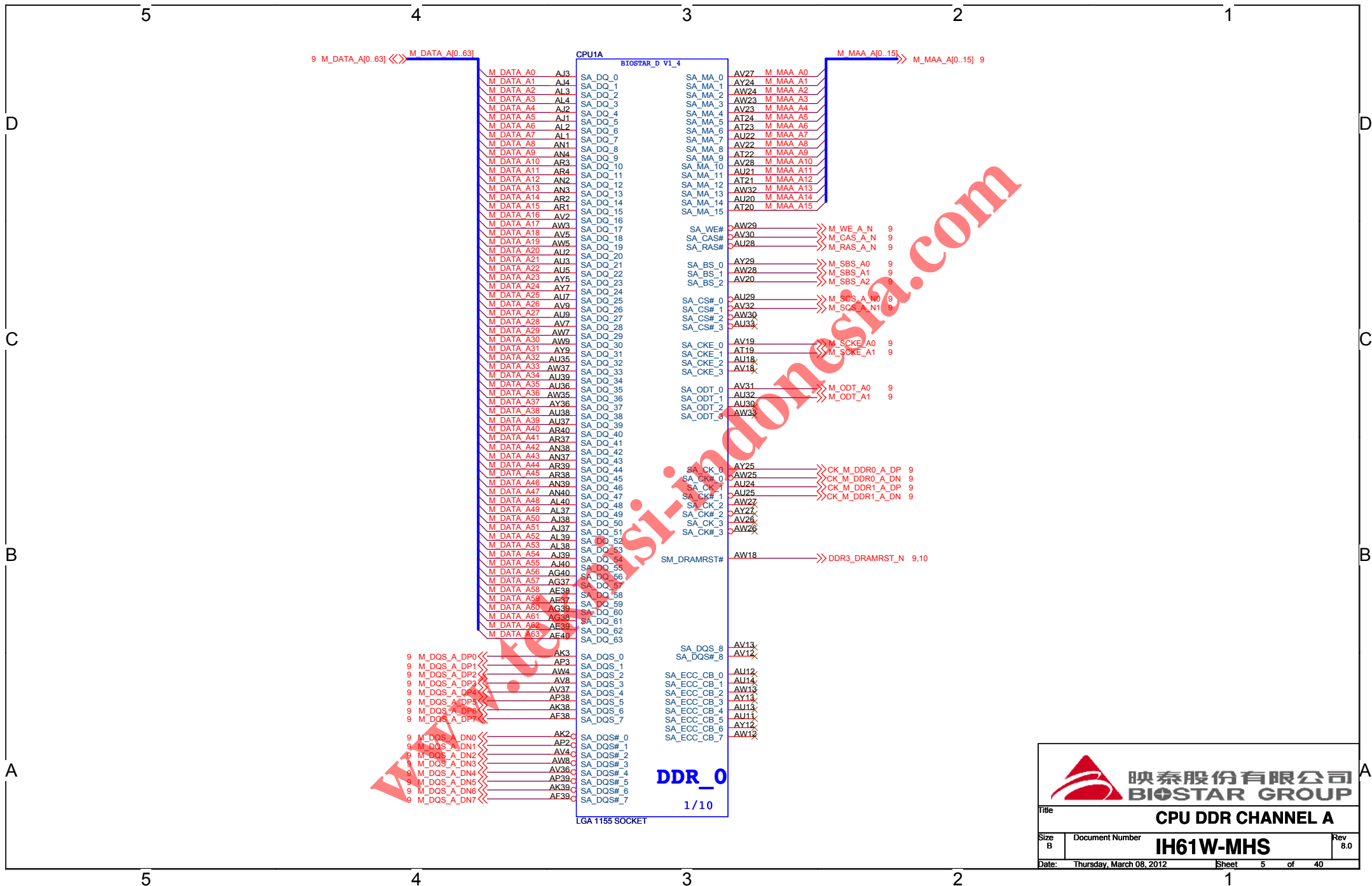


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Title: **CPU PCIEX16/DMI/FDI**

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Title: **CPU DDR CHANNEL A**

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