

Features

- Supports 45nm Intel® μFC-PGA/BGA Socket-P Core™ 2 Duo CPU
- Intel® GM45 / ICH9-M Chipset
- Two SODIMMs up to 4GB DDR2 667/800 SDRAM
- Intel® Graphics Accelerator 4500MHD
- Dual View, 2-CH LVDS, Dual VGA
- 7.1+2-CH Audio Streams, 6W Amplifier
- Dual Atheros Gigabit Ethernet
- 1 CF, 1 PCI, 8 USB, 4 SATA II, 3 COM, 2 CC Talk
- 32 Isolated DI, 32 Darlington DO
- 2 x 512KB Battery Backup SRAM
- JAMMA Interface

Intel GM45	Dual View	Dual VGA	7.1-CH	6W Amplifier
2 GbE	8 USB	4 SATA	3 COM	CF
32 DI	32 DO	CC Talk	Battery Backup	JAMMA

System

CPU	Supports 45 nm Intel® μFC-PGA / BGA Socket-P Core™ 2 Duo CPU (Penryn)
FSB	667/800/1066 MHz
BIOS	Award 16 Mb SPI Flash ROM
System Chipset	Intel® GM45 / ICH9-M
I/O Chip	Winbond W83627DHG
System Memory	Two 200-pin SODIMM sockets support up to 4 GB DDR2 667/800 SDRAM
SSD	One CompactFlash Type I/II socket
Watchdog Timer	Reset: 1 sec.~255 min. and 1 sec. or 1 min./step
Expansion	One PCI slot (PCI Rev. 2.3 compliant)
SRAM	2 x 512 KB Battery Backup SRAM
RTC	2 Sets
Battery	Rechargeable LIR2477 mA/hr, 1 for System, 1 for MCU, SRAM, RNG, Timer, RTC, iButton

I/O

MIO	1 x IDR, 4 x SATA II, 1 x RS-232/482/485, 2 x RS-232, 2 x RS232/CC Talk, 1 x K/B, 1 x Mouse
USB	8 x USB 2.0 (4 edge, 4 pin-header)
DI	32-bit Isolation input (ESD Protected)
DO	32-bit Darlington Output (High Current)
Gaming IO	JAMMA Interface
Timer	4 x 16-bit Interruptible Timer

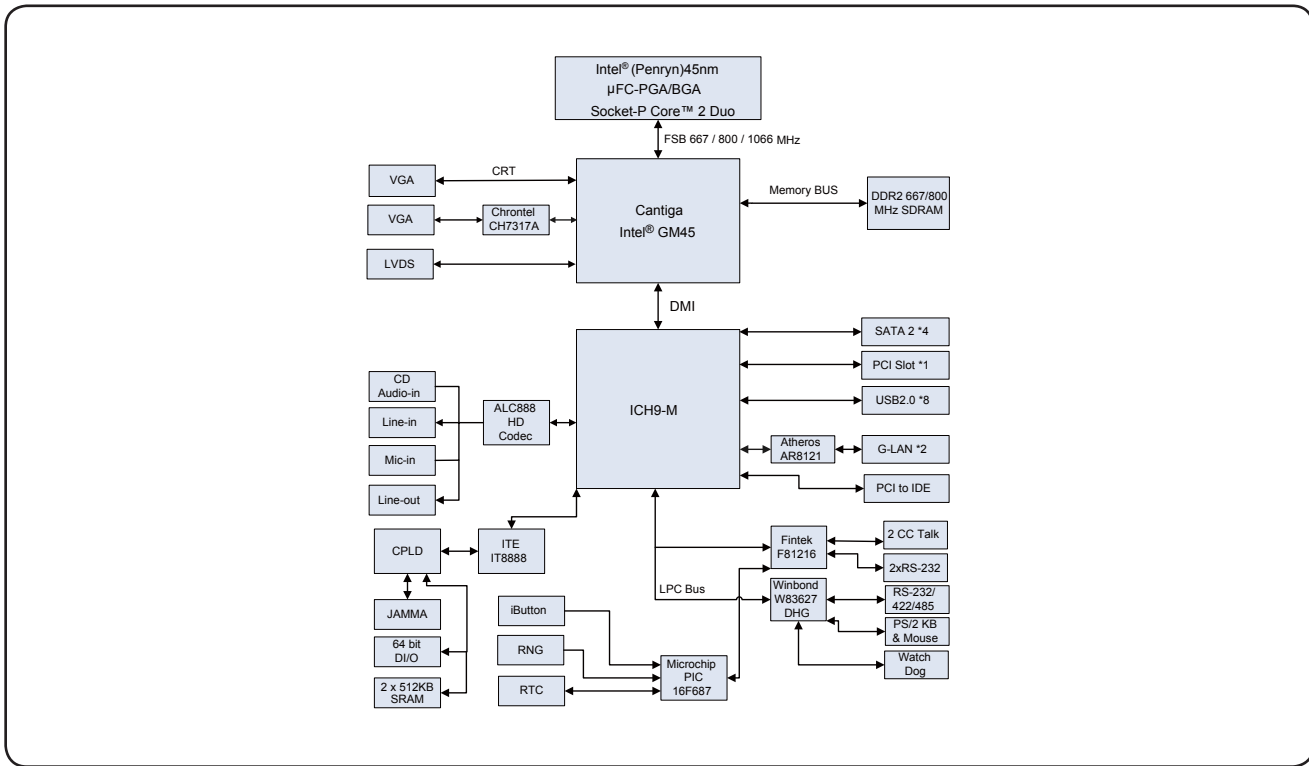
Display

Chipset	Intel® GM45 Intergrated Graphic Media Accelerator 4500MHD
Display Memory	Intel® DVM2T 5.0
Dual Display	CRT + LVDS, or CRT + CRT
LVDS	2-CH 18/24-bit LVDS
VGA Chip	Chrontel CH7317A-TF (SDVO)
VGA Ports	Dual VGA External Ports

Audio

Audio Chip	Intel® ICH9-M Integrated
AC97 Codec	Realtek ALC888 supports 7.1+2-CH with 6W Amplifier
Audio Amplifer	TPA3005D2 6W (per front channel) stereo amplifier

Block Diagram



1
ATX

2
Micro
ATX

3
Mini
ITX

4
Nano
ITX

5
ACP

6
System

7
Accessory

Security

EEPROM	64 KB for Storage of Serial Numbers
Security Chip	Microchip HCS300 KEELOQ® Code Hopping Encoder
iButton	Bi-Directional, programmable GPIO header for iButton (Dallas 1-Wired Interface)
Data Security	Hardware Random Number Generator (RNG)
Intrusion Detection	One Intrusion Detection line for Logger with Date/Time/Events

Ethernet

LAN 1	Atheros AR8121 Gigabit Ethernet, supports Wake on LAN
LAN 2	Atheros AR8121 Gigabit Ethernet, supports Wake on LAN
Ethernet Interface	10/100/1000Base-Tx Gigabit Ethernet compatible

Rear Panel I/O Port

	<ul style="list-style-type: none"> 1 x PS/2 Keyboard 1 x PS/2 Mouse 2 x RS-232 2 x VGA port 4 x USB 2.0 2 x RJ-45 Port 7.1-CH Audio I/O (3 jacks)
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Mechanical & Environmental

Power Type	ATX / AT
Power Requirement	+12V / +5V (ATX :+12V,+5V,+5VSB)
Operating Temperature	0~60°C (32~140°F)
Operating Humidity	0%~90% relative humidity, non-condensing
Size (L x W)	6.7" x 7.9" (170 mm x 200 mm)
Weight	0.88 lbs (0.4 Kg)

Ordering Information

ACP-GM45-A1R	Intel® GM45 Core™ 2 Duo Mini ITX Gaming Board with Dual VGA, Dual LVDS, 7.1+2-CH Audio, 6 W Amplifier, Dual Gbe, CF, PCI, 8 USB, 4 SATA, COM, 32 DI, 32 DO, CC Talk, Battery Backup, JAMMA
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