DVMB-554E

Intel Core 2 Duo based digital video main board with 4 channel video input

Features

- Supports Intel® Core™ 2 Duo, Core™ Due, and Core™ Solo processors
- Four channel PCIe based video input at 120/100 (NTSC/PAL) frames per second
- Support DDR2 Dual channel memory
- ◆ Dual display output, DVI + VGA, or LVDS + VGA
- ◆ Supports Windows 2000/XP driver and MPEG4 encoder SDK





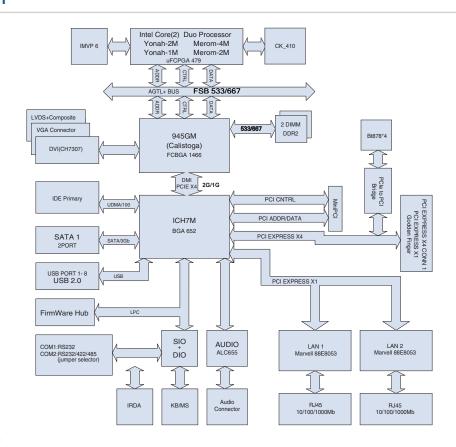
Description

DVMB-554E is the first digital video main board to be built with the Intel Core 2 Duo platform, PCIe technology and four channel video input driven by the onboard video capture chip. Intel Duo core technology offers great performance for video analysis or video compression. The new PCIe interface for four Video chips relieves the usual limitations on PCI bandwidth. The practical result is that the DVMB-554E can capture four channels of video data (D1) at full motion frame rates. The small MINI-ITX form factor and its low power CPU combine to establish the DVMB-554E as the ideal platform for POS integration DVRs, ATM integration DVRs, Vehicle computers and the intelligent video surveillance platforms.

Specifications

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CPU	Supports Intel μFC-PGA 478/μFC-BGA 479 Core Duo with 65 nm process technology			
FSB	400/533/667 MHz			
System Chipset	Intel 945GM, Intel ICH7M			
I/O Chipset	Winbond W83627HF-AW			
Memory	Dual channel memory architecture 2 x SO-DIMM. 2 GB DDR2 667/533/400 non-ECC, unbuffered memory			
BIOS	4 MB Flash ROM, AWARD BIOS, PnP, DMI2.0, WfM2.0, SM BIOS 2.3			
Power Management	Supports ACPI specification and OS Directed Power Management Wake-On-Events include: - Wake-On-FSZ Keyboard/Mouse - Wake-On-DSB Keyboard - Wake-On-LAN - RTC timer to power-on the system System power management spported Support PXE function CPU stopped clock control Hardware supports SMI green mode Microsoft®/Intel APM 1.2 compliant Soft Power supported - ACPI v1.0a specification AC power failure recovery			
HDD interface	1 x Enhanced IDE interfaces support up to 2 x IDE devices. Ultra DMA 100 mode up to 100 MB/sec. 2 x SATA ports support up to 150 MB/sec.			
Serial Ports	COM1: RS-232, COM2: RS-232/422/485			
USB	8 x USB host interface, USB 2.0/1.1 compliant 2 x 2 ports on board (with LAN connector) 2 x 2 ports pin header (2 x set: 5 x 2, 2.0 mm pin header w/ idiot-proof, front-end)			
PS/2	1 x (keyboard and mouse with Y cable)			
I2C/SMBus	4-pin Wafer box 2.0 mm			
VGA/LCD Interface	Intel Graphics Media Accelerator 950			
Display	VGA/LVDS/DVI/composite			
Ethernet Interface	Dual Marvell 88E8053 PCIe Gigabit LAN Controller, featuring Al NET2			
Audio Interface	AC97 2.3 compliant 5.1 Channel audio supported (internal connector) (Pin assignment will provide later)			
CF	Optional CF socket on the solder side accepts Type I/II CF Card			
Mini PCI	1			
PCle	PCle (x1) Gold finger + PCle (x4)			

Block Diagram



Specifications

Internal I/O Connector	2 x connectors for 4 additional USB 2.0/1.1 ports 1 x LVDS LCD panel connector 1 x LCD/inverter power connectors 1 x Digital VO connector 1 x CD Audio-in connector 1 x IrDA connector 1 x IrDA connector 1 x 44-pin IDE 1 connector		
Internal I/O Connector	1 x ATX power supply connector 1 x front panel connector 3 x fan connectors 2 x SATA connectors 1 x video input connectors (option) 1 x video loop through connectors (option)		
External I/O Connector	1 x VGA 2 x COM 1 x PS/2 keyboard and mouse Y cable 1 x Audio I/O 2 x RJ-45 4 x USB 2.0/1.1 1 x DVI 1 x composite		
Digital Video	4 x BT-878 on board with box header		
Operating Temperature	0° C ~ 60° C (32° F ~ 140° F)		
External Power Terminal	ATX power connector		

Ordering Information

Part Number	Form Factor	Description	Chipset
DVMB-554E	mini-ITX (170 x 170 mm)	Socket 479 Intel Core 2 Duo/Core Duo/Core Solo processor based with 4 channels video capture/PCI-E/Dual Giga LAN	Intel 945GM