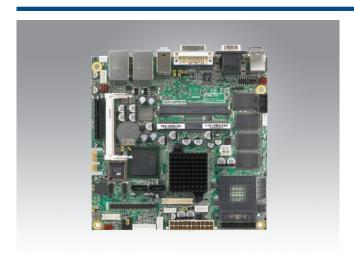
# DVMB-554E Intel® Core™ 2 Duo Based Digital Video Main Board with 4 Channel Video Input



#### **Features**

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



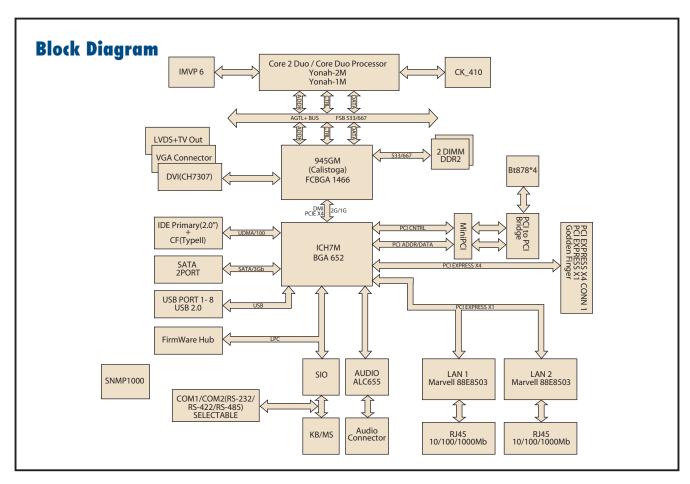
### **Description**

DVMB-554 is the first digital video main board to be built with the Intel Core 2 Duo platform, PCle technology and four channel video input driven by the onboard video capture chip. Intel Core Duo 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-554 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-554 as the ideal platform for POS integration DVRs, ATM integration DVRs, Vehicle computers and the intelligent video surveillance platforms.

#### **Specifications**

FSB 400,533,667 MHz System Chipset Intel 9456M, Intel ICH7M VO Chipset Winbond W83627HF-AW Memory Dual channel memory architecture 2 x SODIMM. 2 GB DDR2 667/533/400 non-ECC, unbuffered memory BIOS 4 MB Flash ROM, AWARD BIOS, Pn.P. DMIZ.0, WIMZ.0, SM BIOS 2.3 Supports ACPI specification and OS birected Power Management Wake-On-Events include: - Wake-On-HSP keyboard/Mouse - Wake-On-USB keyboard/Mouse - Wake-On-LSP keyboard/Mouse - Wake-On-LSP keyboard/Mouse - Wake-On-LSP keyboard - Wake-On-LSP keyboard/Mouse - Wake-On-LSP keyboard - Wake-On-LSP ke	CPU	Supports Intel µFC-PGA 478/µFC-BGA 479 Core Duo with 65 nm process technology				
System Chipset Intel 945GM, Intel ICH7M I/O Chipset Winbond W83627HF-AW Winbond W83627HF-AW Winbond W83627HF-AW Winbond W83627HF-AW Winbond W83627HF-AW Wake-On-Pust BiOS, PnP, DMI2.0, WIM2.0, SM BIOS 2.3  Supports ACPI specification and OS Directed Power Management Wake-On-Evrist include:  - Wake-On-Pust Reyboard/Mouse - Wake-On-USB Keyboard						
Winbond W83627HF-AW						
Memory  Dual channel memory architecture 2 x SODIMM. 2 GB DDR2 667/533/400 non-ECC, unbuffered memory  4 MB Flash ROM, AWARD BIOS, PnP, DMI2.0, WIM2.0, SM BIOS 2.3  Supports ACP is specification and OS Directed Power Management  Wake-On-Events include:  - Wake-On-Events include:  - Wake-On-LSM Keyboard  - Wake-On-LAN  - RTC timer to power-on the system  System power management system power management system  System power management system of CPU stopped clock control  Hardware supports SMI green mode  MicrosotfyIntel APM 1.2 compliant  Soft Power supported - ACPI v1.0 a specification  AC power failure recovery  HDD interface  1 x Enhanced IDF interface supports 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  8 x USB host interfaces. USB 2 c0.7.1 compliant  2 x 2 ports on board (with LAN connector)  2 x 2 ports pin header (2 x set 5 x 2, 2 to m pin header w/ idiot-proof, front-end)  PS/2  1 x (keyboard and mouse with Y cable)  L2C/SMBus  4-pin Wafer box 2.0 mm  VGA/LCD Interface  Dual Marvell 8858035 PCIe Gigabit LAN Controller, leaturing AI NET2  Action 1.1 (Pin assignment will provide later)  CF  Optional CF socket on the solder side accepts Type I/II CF Card  Mini PCI  1 1						
BIOS 4 MB Flash ROM, AWARD BIOS, PnP, DMI2.0, WIM2.0, SM BIOS 2.3  Supports ACPI specification and OS Directed Power Management Wake-On-Events include:  - Wake-On-PS/Z Keyboard/Mouse - Wake-On-LNN - RTC timer to power-on the system System power management sported Supports 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 faiture recovery  HDD interface 1 x Enhanced IDE interface supports 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 COMT: RS-232/COM2: RS-232/422/485  8 x USB host interfaces, 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/Z 1 x (keyboard and mouse with Y cable) Display VGA/LCD Interface Dual Marvell 8888053 PCIe Gigabit LAN Controller, featuring AI NET2  Audio Interface Dual Marvell 8888053 PCIe Gigabit LAN Controller, featuring AI NET2  Audio Interface Display VGA/LYDS/DVI/composite Ethernet Interface Dual Marvell 8888053 PCIe Gigabit LAN Controller, featuring AI NET2  Audio Interface Display CPC-SMB Secoket on the solder side accepts Type I/II CF Card  Mini PCI 1	-					
Supports ACPI specification and OS Directed Power Management Wake-On-Events include:  - Wake-On-PSZ Keyboard/Mouse  - Wake-On-LNA  - Wake-On-LNA  - RTC timer to power-on the system  System power management sported Supports PXE function CPU stopped clock control Hardware supports SMI green mode Microsoft/Intel APM 1.2 compliant Soft Power supported - ACPI 1.0 as specification AC power failure recovery  HDD interface  1 x Enhanced IDE interface supports by 0.2 x IDE devices. Ultra DMA 100 mode up to 100 MB/sec. 2 x SATA ports support up to 150 MB/sec.  2 x SATA ports support up to 150 MB/sec.  Serial Ports  COM1: RS-232, COM2: RS-232/422/485  8 x IDS host interfaces, USB 2.0/1.1 compliant USB  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)  IZC/SMBus  4-pin Water box 2.0 mm  VGA/LCD Interface Intel Graphics Media Accelerator 950  Display  VGA/LDS/DVI/composite Ethemet Interface Dual Marvell B8E80S3 PCIe Gigabit LAN Controller, featuring Al NET2  Audio Interface  Optional CF socket on the solder side accepts Type I/II CF Card  Mini PCI  1						
Wake-On-Events include:	BIOS					
Serial Ports  COM1: RS-232, COM2: RS-232/422/485  8 x USB host interfaces, USB 2.0/1.1 compliant USB  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 AI 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	Power Management	Wake-On-Events include:  - Wake-On-PS/2 Keyboard/Mouse  - Wake-On-LSB Keyboard  - Wake-On-LAN  - RTC timer to power-on the system System power management spported Supports PXE function CPU stopped clock control Hardware supports SMI green mode Microsoft/Intel APM 1.2 compliant Soft Power supported - ACPI v1.0a specification				
8 x USB host interfaces, 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 AI NET2  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	HDD interface					
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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  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	PS/2					
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Display VGA/LVDS/DVI/composite  Ethernet Interface Dual Marvell 88E8053 PCIe Gigabit LAN Controller, featuring Al NET2  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	VGA/LCD Interface	Intel Graphics Media Accelerator 950				
Ethernet Interface Dual Marvell 88E8053 PCIe Gigabit LAN Controller, featuring Al NET2  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						
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Mini PCI 1	Audio Interface	AC97 2.3 compliant 5.1 Channel audio supported (internal connector)				
	CF	Optional CF socket on the solder side accepts Type I/II CF Card				
PCIe (x1) Gold finger + PCIe (x4)	Mini PCI	1				
	PCle	PCIe (x1) Gold finger + PCIe (x4)				

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 I/O connector			
	1 x CD Audio-in 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 (optional)			
	1 x video loop through connectors (optional)			
	1 x VGA			
	2 x COM			
External I/O Connector	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			
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## **Ordering Information**

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