

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 second
- Supports DDR2 Dual channel memory
- Dual display output, DVI + VGA, or LVDS + VGA
- Supports Windows® 2000/XP driver and MPEG4 encoder SDK

Description

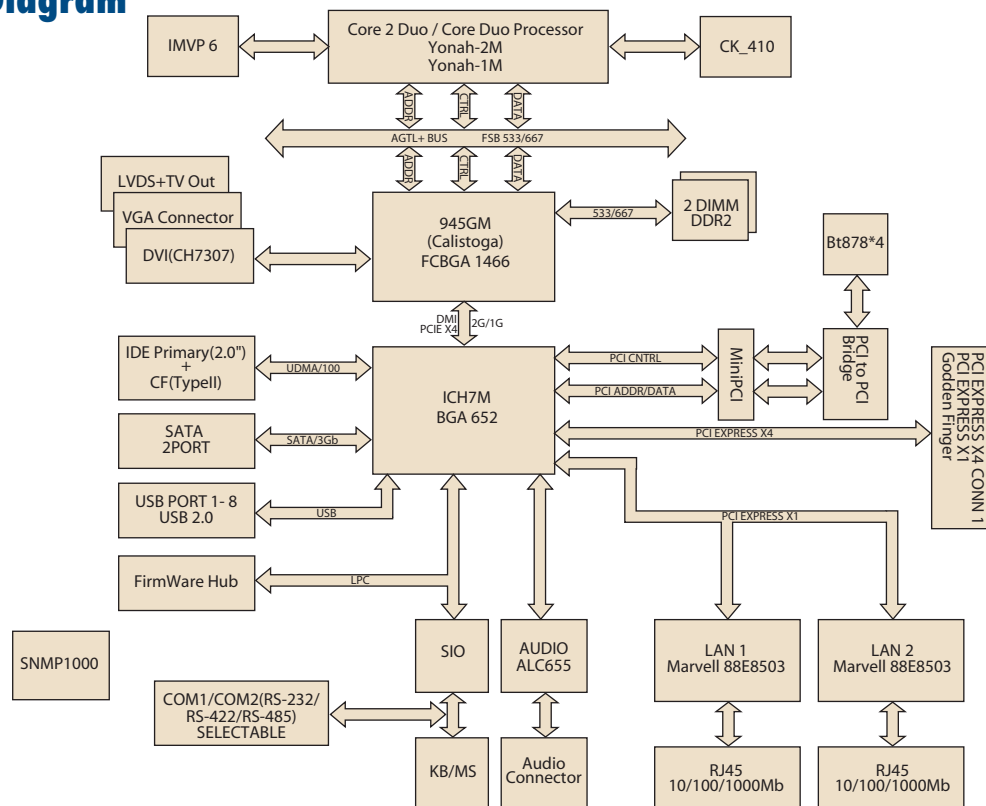
DVMB-554 is the first digital video main board to be built with the Intel Core 2 Duo platform, PCIe technology and four channel video input driven by the onboard video capture chip. Intel Core Duo technology offers great performance for video analysis or video compression. The new PCIe interface for 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

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 SODIMM. 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-PS/2 Keyboard/Mouse - Wake-On-USB Keyboard - Wake-On-LAN - RTC timer to power-on the system System power management supported 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 failure 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	COM1: RS-232, COM2: RS-232/422/485
USB	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
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
PCIe	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)
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

Block Diagram



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