Digital Video Motherboard

Selection Guide

Model Name	DVMB-764-16CFE (project based only, upon request)	DVMB-764-16D1E	DVMB-554E
Form Factor	ATX		Mini-ITX
Processor	Intel Quad / C2D / Pentium 4 / Celeron D LGA 775		Intel Core 2 Duo / Core Duo Socket 479
Chip Set	Intel Q965 + ICH8DO		Intel 945GM + ICH7
Memory (Max Capacity)	Dual channel DDR2 533/667/800 MHz (Max 8G)		Dual Channel DDR2 533/667 (Max 4G)
Graphics	Intel GMA 3000		Intel GMA 950
Memory (Max Capacity)	Single Gigabit LAN	Dual Gigabit LAN	Dual GbE LAN: Intel 82566DM and Marvell 88E8053
Expansion Slot	PCIe x 16, PCIe x 4, PCI		PCIe x 4
SATA	6 channels 300 MB/s with Matrix RAID & Hot plug		2 channels 300 MB/s
EIDE	2 ATA 100/66/33		1 ATA 100/66/33
IO Interface	2 x RS-232, 10 x USB (4 on back IO), Parallel port, VGA, PS2, Audio		1 x VGA, 2 x COM, 1 x PS/2 Keyboard, 1 x PS/2 Mouse, 1 x Audio I/O, 2 x RJ45, 4 x USB 2.0/1.1, 1 x DVI, 1 x Composite
WDT & CPLD	WDT & Software protection key		WDT
Video Standard	Composite NTSC/PAL		Composite NTSC/PAL
Video Input	16 Channel @ 480/400 FPS		4 Channel @ 120/100 FPS
Live Preview	16 Channel @ 480 FPS (up to D1)		4 Channel @ 120 FPS (up to D1)
Video Codec	ISO/IEC 1496-2 MPEG4 Advanced Simple Profile/MJPEG		MPFG4 SW
Video Encoder Performance	480/400 fps @ CIF	480/400 fps @ D1	120/100 fps @ D1
Video Output	-	1 Smart Quad TV output	Composite TV-out
Audio Input /Encoder	16 Channel/ADPCM		-
Digital Input/Output	12 Isolate Input/8 Relay output		20-pin GPIO (SDK supports 7 input and 8 output)
Dual Video Stream	MPEG4, MJPEG		MPEG4
OSD	Yes, with encoding video		-
Motion Detection	Motion detection & motion trace		-
Software Development Kits	Supports Windows XP. DVP Suite SDK with Sample program and C++ Source code		-

Digital Video System/ Full DVR System

Esis Pty Ltd
Ph 02 9481 7420
Fax 02 9481 7267
www.esis.com.au
ESIS Industrial Electronics

Selection Guide

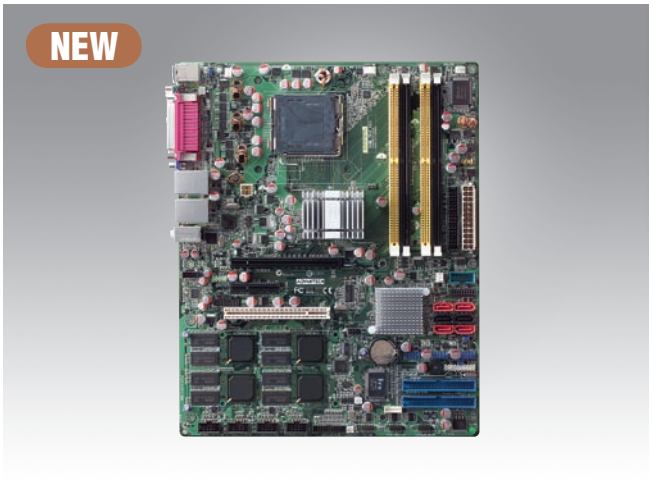
Model Name	DVS-350	DVS-355	DVS-510	DVS-500	DVS-5120	DVS-640
Form Factor	Rugged Mobile Platform	Rugged Mobile Platform	Compact 1 U	Desktop	Wallmount	4U Rack mount
Processor System	Pentium M	Core Duo Mobile	Core Duo Mobile	Core 2 Duo / Pentium 4	Core 2 Duo / Pentium 4	Core 2 Duo / Pentium 4
Video Input	4 - 16 Channel	6 Channel	4 Channel	4 - 16 Channel	4 - 16 Channel	4 - 32 Channel
Video Encoding	MPEG 4 SW Compression	MPEG 4 SW Compression	MPEG 4 SW Compression	MPEG-4 SW/HW or H.264 HW	MPEG-4 SW/HW or H.264 HW	MPEG-4 SW/HW or H.264 HW
Video Performance	120/100 fps	60/50 fps	120/100 fps	Up to 480 fps	Up to 480 fps	Up to 960 fps
I/O Interface	USB, DIO, COM, WLAN, VGA, TV-OUT	USB, COM, WLAN, DVI, VGA, Cardbus	USB, COM, VGA, DVI, PS2	1 x VGA, 1 x RJ-45, 1 x COM (RS-232), 4 x USB2.0, 1 x Parallel, 2 x PS/2, 1 x MIC-In, 1 x Line-In, 1 x Line-Out		
Storage	1 x 2.5" HD	1 x 2.5" HD, Card bus	1 x 3.5" HD	2 x 3.5" HD	3 x 3.5" HD	4 x 3.5" HD
Dimensions	232 x 138.4 x 65 mm (9.13" x 5.43" x 2.56")	232 x 138.4 x 65 mm (9.13" x 5.43" x 2.56")	410 x 44 x 252 mm (16.14" x 1.73" x 9.92")	370 x 88 x 370 mm (14.57" x 3.46" x 14.57")	320 x 164 x 307 mm (12.60" x 6.46" x 12.09")	482 x 177 x 480 mm (18.98" x 6.97" x 18.90")
Software Development Kits	Supports Windows XP. DVP Suite SDK with Sample program and C++ Source code			SDK specific to capture card		
Temperature	0 ~ 60° C (32 ~ 140° F)	-15 ~ 60° C (5 ~ 140° F)	0 ~ 60° C (32 ~ 140° F)	0 ~ 40° C (32 ~ 104° F)	0 ~ 40° C (32 ~ 104° F)	0 ~ 50° C (32 ~ 122° F)

Selection Guide

Model Name	PVS-500	PVS-5120	PVS-540	PVS-640	PVS-660
Form Factor	Desktop	Wallmount	4U Rack mount	4U Rack mount	4U Rack mount with 6 HDD RAID
Processor System	Core 2 Duo / Pentium 4	Core 2 Duo / Pentium 4	Core 2 Duo / Pentium 4	Core 2 Duo / Pentium 4	Core 2 Duo
Video Input	8 - 16 channel	8 - 16 channel	8 - 16 channel	8 - 32 channel	8 - 32 channel
Video Encoding	H.264 HW	H.264 HW	H.264 HW	H.264 HW	H.264 HW
Video Performance	up to 480 fps	up to 480 fps	up to 480 fps	up to 960 fps	up to 960 fps
General Functions	Real Time Display and Playback				
	Multifunctional Playback System with Intelligent Search				
	Intelligent e-Map Function				
	Comprehensive smart detection of 6 different events (General Motion, Missing Object, Foreign Object, Lose Focus, Camera Occlusion, Signal Lost)				
	Powerful Remote Control Functions via IE Browser				
Language	Czech, Denmark, English, Finnish, French, German, Greek, Hebrew, Hungarian, Italian, Japanese, Persian,Portuguese, Russian, Simplified Chinese, Slovak, Spanish, Thai, Traditional Chinese, Turkish				
Temperature	0 ~ 40° C (32 ~ 104° F)	0 ~ 40° C (32 ~ 104° F)	0 ~ 40° C (32 ~ 104° F)	-10 ~ 50° C (14 ~ 122° F)	0 ~ 40° C (32 ~ 104° F)

DVMB-764

16 CH D1 480 FPS MPEG4 Hardware Encoding ATX Main Board with Intel® Q965 Platform



Features

- 16 Channel D1 480 FPS MPEG4 Hardware Encoding on board
- 16 Channel Audio Encoding on board
- Intel® Q965 533/800/1066 MHz FSB
- Dual video stream MPEG4, MJPEG
- Integrates with 12 DI, 8DO and 2 RS-485, or 16 DI, 8 DO
- Supports 6 SATA HD with RAID 0, 1, 5
- Supports Dual GbE Ethernet LAN
- 1 x PCIe x16, 1 x PCIe x4 and 1 x PCI
- Supports Windows® 2000/XP driver and video development SDK
- All solid capacitor design

RoHS COMPLIANT 2002/95/EC CE FCC

Introduction

DVMB-764 is a high performance video surveillance main board built with an Intel Q965 Core 2 duo/Quad Core platform and 16 channel MPEG4 hardware encoding engine. It supports 16 channel video encoding at D1 resolution and a total of 480 frames per second. The audio/video codec integrates multiple functions like real time preview, encoding, smart quad, motion detection, OSD and video playback. It can generate multiple video streams, two high resolution video MPEG4s, and uses MJPEG for storage. In addition to the on board graphic engine and the 6 SATA RAID support, an additional graphics card and hardware RAID card can also be used via the PCIe interface. The standard ATX form factor and the rugged design, which includes dual LAN, dual IDE and all solid capacitors, make the DVMB-764 the ideal platform for high performance digital video applications like intelligent video analysis, video conferencing, and PC based DVR or hybrid DVR.

Specifications

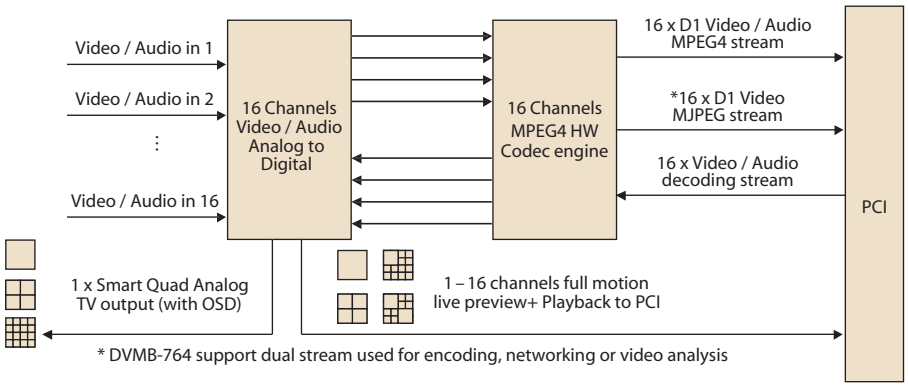
Processor System	CPU	LGA775 socket for Intel Quad-core / Core 2 Extreme / Core 2 Duo / Pentium D / Pentium 4 / Celeron D processor Intel Hyper-Threading Technology ready
	Chipset	Intel Q965+ICH8DO
	BIOS	Award 16Mbit SPI
	Front Side Bus	533/800/1066 MHz
Video System	Video Standard	Composite NTSC/PAL
	Video Input	16 Channel @ 480/400 FPS
	Capture Resolution	CIF/2CIF/D1
	Live Preview	16 Channel @ 480 FPS
	Video Codec	ISO/IEC 1496-2 MPEG4 Advanced Simple Profile
	Video Encode Performance	480/400 fps @ D1
	Video output	1 Smart Quad TV output (Preview or Playback)
	Audio Input /Encoder	16 Channel/ADPCM
	Digital Input/Output	12 isolated inputs/ 8 relay outputs
	Video Stream	MPEG4, MJPEG
	OSD	Yes, with encoding video
	Motion Detection	Motion detection & motion trace
	Software Development Kits	Support Windows XP DVP Suite SDK with Sample program and C++ Source code
Expansion Slot	PCIe x16	4.0 GB/s per direction, 1 slot
	PCIe x4	1 GB/s per direction, 1 slot
	PCI	32-bit/33MHz, 1 slots
Memory	Technology	Dual channel DDR2 533/667/800 MHz
	Max. Capacity	8 GB
	Socket	240-pin DIMM x 4
Graphics	Embedded	Intel Graphics Media Accelerator 3000 integrated High Definition Video Processing with max. resolutions to 2048 x 1536 bpp (@ 75 Hz)
	Add-on	PCIe x 16 slot, ADD2 on PCIe x 16 for 2nd Display
Ethernet	Interface	10/100/1000 Mbps
	Controller	GbE LAN: Intel 82566DM and Marvell 88E8053
	Connector	RJ45 with LED connector x 2
SATA II	Max. Data Transfer Rate	300 MB/s
	Channel	6 (with RAID 0, 1, 5 and hot plug support)
EIDE	Mode	ATA 100/66/33
	Channel	2
I/O Interface	VGA	1
	USB	Max. 10 (USB 2.0 compliant), 4 ports at back panel
	Audio	MIC In, Line In, Line Out
	Serial	2
	Parallel	1 (SPP/EPP/ECP)
	FDD	1
	PS/2	1 (with Y cable)

Specifications

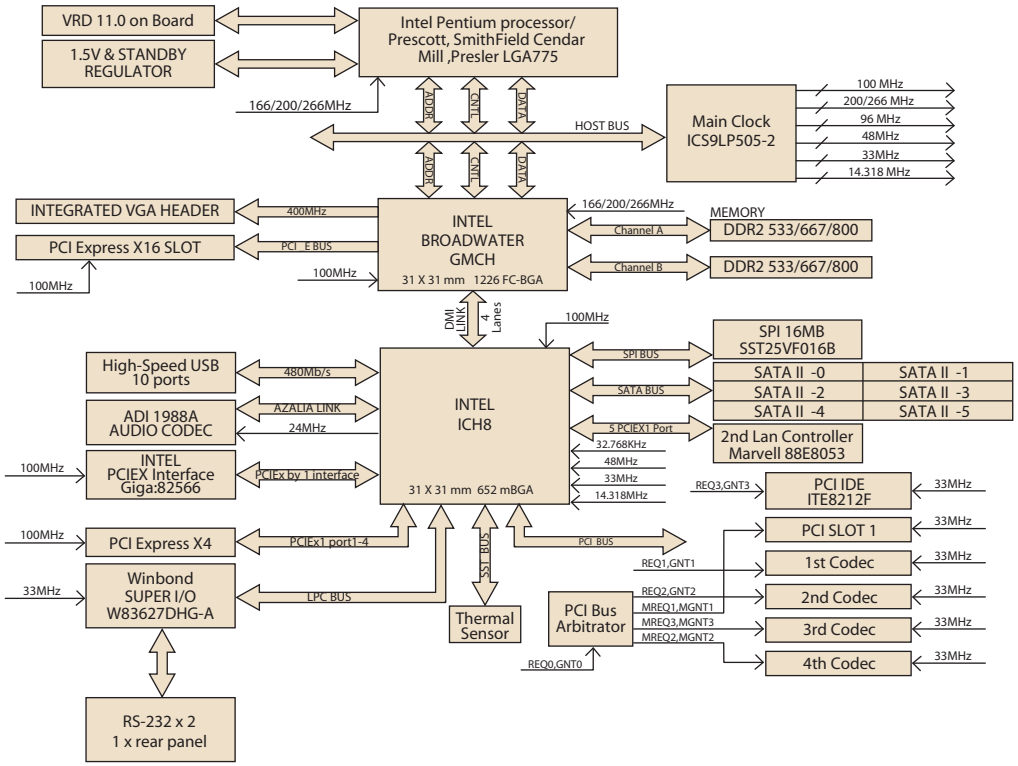
Watchdog Timer & CPLD		Hardware WDT & software protection function lets customer insert specific key for software protection					
Power Requirements	Typical	Intel Core 2 Due 2.13 GHz and four 1 GB DDR2 667Mhz SDRAM memory modules					
		+12 V	+5 V	+3.3 V	5 Vsb	-5 V	-12 V
		10.36 A	3.95 A	4.5 A	1.2 A	12 mA	36 mA
Environment	Temperature	Operating			Non-Operating		
		0-55° C (32 ~ 131° F), depends on CPU's speed and cooler solution			-20 ~ 70° C (-4 ~ 158° F)		
Physical Characteristics	Dimensions (W x D)	304.8 x 244 mm (12" x 9.6")					

Block Diagram

Video



Processor System



Ordering Information

Part Number	Description
DVMB-764-08D1E (project based only, upon request)	Socket LGA775; 8 CH D1 240FPS MPEG4 Hardware Encoding Digital Video Motherboard
DVMB-764-16CFE (project based only, upon request)	Socket LGA775; 16 CH CIF 480FPS MPEG4 Hardware Encoding Digital Video Motherboard
DVMB-764-16D1E	Socket LGA775; 16 CH D1 480FPS MPEG4 Hardware Encoding Digital Video Motherboard

Accessories

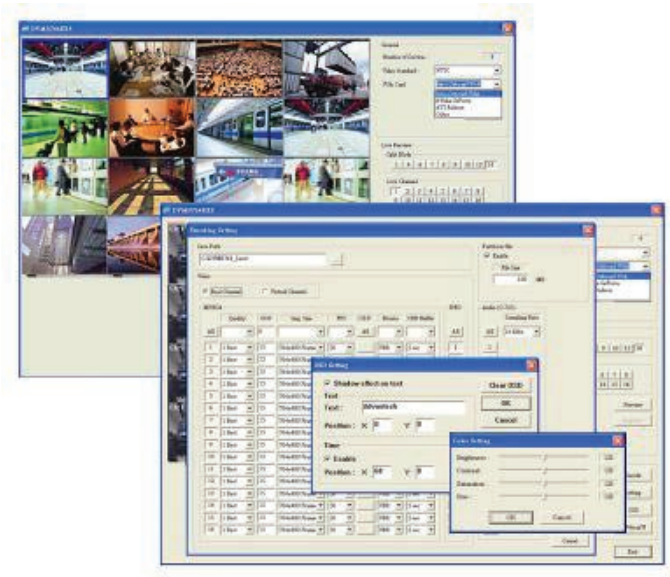
Module	Description
9692A21000E	4 channel Video-In module with BNC connectors
9692080400E	4 x DO + 4 x DI (2 x RS-485; jumper selectable) module
9698080500E	8 x DI module

ADD2 Card	Description
AIMB-DVI-00A1E	ADD2 DVI Card (PCIe)
AIMB-VGA-00A1E	ADD2 VGA Card (PCIe)

* Only DVA-806 is inside DVMB-764 box as default module. Others accessories are optional items.

Full function SDK and Demo Program with Complete C++ Source Code

DVMB-764 comes with a 16 channel SDK and C++ based demo program which helps the system integrator speed up application development or integration. It includes multi functions like video encode, decode, preview, GPIO control, hardware motion detection control, smart quad data preview and all the parameter settings.



Optional Items

CPU

Item	Socket LGA775 Core 2 Duo Processor	
P/N	96MP2DD-26FA-4M7T	Intel CR2 Duo DT 2.66G 4M, 775-pin, 1066 MHz
	96MP2DD-24FA-4M7T	Intel CR2 Duo DT 2.40G 4M, 775-pin, 1066 MHz

Item	Socket LGA775 Pentium D Processor	
P/N	96MPPD-3.4F8-4M7T	Intel P-D 3.4G 800F 4M, 775-pin, 800 MHz
	96MPPD-3.2F8-4M7T	Intel P-D 3.2G 800F 4M, 775-pin, 800 MHz

Item	Socket LGA775 Pentium 4 Processor	
P/N	96MPP4-3.8F8-2M7T	Intel P4 3.8G 800F 2M 775-pin, 800 MHz
	96MPP4-3.4F8-2M7T	Intel P4 3.4G 800F 2M 775-pin, 800 MHz

Item	Socket LGA775 Celeron D Processor	
P/N	96MPCD-3.2F5-5K7T	Intel CEL-D 3.2G 512K 775-pin, 533 MHz
	96MPCD-2.9F5-2K7T	Intel CEL-D 2.93G 256K 775-pin, 533 MHz

Memory

Item	Long-DIMM DDRII 667 RAM	
P/N	96D2-2G667FB-TR	Transcend 2G DDR2-667 240P 128 x 4 (G)
	96D2-1G667NN-TR	Transcend 1G DDR2-667 240P 64 x 8 (G)
	96D2I-1G667NN-TR	Transcend 1G DDR2-667 240P 64 x 8, I GRD (G)
	96D2I-512M667NN-TR	Transcend 512M DDR2-667 240P 64 x 8, I GRD (G)

Item	Long-DIMM DDRII 533 RAM	
P/N	96D2-1G533NN-AP	Apacer 1G DDR2-533 240P 64 x 8 (G)
	96D2-1G533NN-TR1	Transcend 1G DDR2-533 240P 64 x 8 (G)
	96D2-512M533NN-AP	Apacer 512M DDR2-533 240P 64 x 8 (G)
	96D2-512M533NN-TR1	Transcend 512M DDR2-533 240P 64 x 8 Samsung (G)

Others

P/N	1750000334	Cooling LGA775 CPU with fan up to 3.8G w/BP
	1960014558T000	Cooling LGA775 CPU DUCTSINK-P4

DVS-355M

Embedded/Mobile Digital Video Platform with Intel® Core™ Duo Mobile Processor

Features

- Up to 6 channel composite inputs that can share a total frame rate of 60/50 fps
- Fanless design within sealed construction
- Supports Intel® Core™ Duo Mobile Processor
- x86 architecture for easy application development & integration
- Anti-vibration, anti-shock design to ensure maximum reliability
- Wide input range power source (9 ~ 30 V DC)
- Supports Windows® 2000/XP with driver and SDK

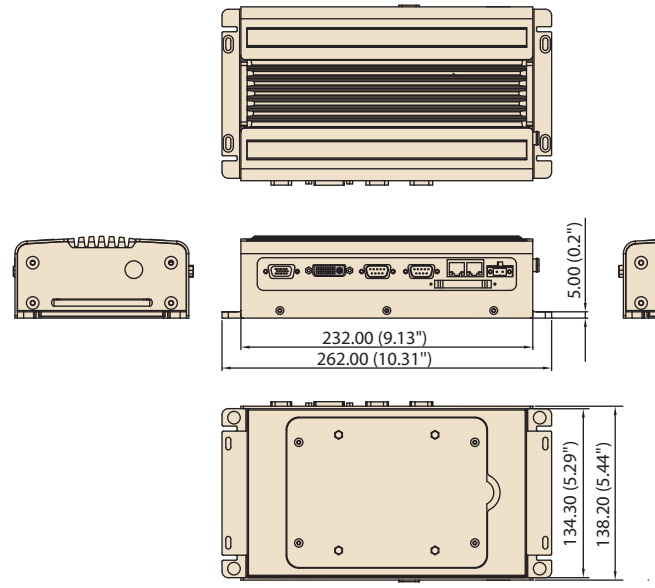
Introduction

The DVS-355M provides the digital video market with a perfect solution for applications in harsh environments. The DVS-355M is the smallest industrial grade PC-based system that supports 6 camera inputs. The x86 open platform eases application software integration. Its fanless, anti-vibration, and anti-shock design make it suitable for mission-critical installations in demanding environments. A wide acceptable power range of 9 to 30 V DC protects the system from power surges when used in vehicles. These features, combined with TV-OUT, WLAN, and a CardBus interface, make the DVS-355M a great solution for embedded/mobile applications.

Specifications

Video System	Video Standard	Composite for NTSC/PAL
	Video Input	6 channels share a total of 60 fps
	Encoding	Up to 60 fps at D1 resolution with software encoding
	Capture Resolution	Up to D1 resolution - 720 x 480 (NTSC) / 768 x 576 (Full PAL)
	Total Capture Frame Rate	60/50 fps (NTSC/PAL)
	Image Processing	Hardware adjustment of hue, contrast, saturation, and brightness
	Data Output Format	YUY2 planar formats supported
Processor System	CPU	Intel Core Duo U2500 1.2 GHz Mobile Processor
	Chipset	Intel 945GM / ICH7M-DH
	L2 Cache	2M
	BIOS	AWARD 4-Mbit BIOS
	Front Side Bus	667 MHz
Memory	Technology	Dual channel DDR2 533/667
	Max. Capacity	2 GB
	Socket	2 x 200-pin SODIMM
Graphics	Chipset	Intel Graphics Media Accelerator 950
	Memory Size	Shared system memory up to 224 MB
	Resolution	Up to 2048 x 1536 at 75 Hz
Ethernet	Interface	Gigabit LAN Controller
	Controller	Marvell 88E8053
	Connector	2 x RJ-45
Storage	IDE-0	2.5" HDD Tray
	IDE-1	CompactFlash socket for type I/II
I/O Interface	DVI	1 (DVI - I connector , digital signal output only)
	VGA	1 (D-sub 15-pin)
	LAN	Dual Gigabit LAN (RJ-45)
	USB	4 (USB 2.0 compliant, 480Mbps)
	Audio	AC97 - Line-out, Mic-in, Line-in
	Serial	COM1 – RS-232, COM2 – RS-232
	PS/2	1 (For keyboard and mouse with Y cable)
	Mini-PCI	1 (For Integrated WLAN module)
	CardBus	1 x slot
	TV Out	S-video and Composite video
Power Requirements	Management	APM 1.2, ACPI supported
	Power Consumption	Average 15 W, Maximum 49 W
	Input Voltage	9 ~ 30 V_{DC}, Typical 9 V_{DC} @ 5.4 A, 19 V_{DC} @ 2.9 A
	Others	Support Boot on Power failure and schedule boot up function
Watchdog Timer	Output	Interrupt, system reset
	Interval	Programmable 1 ~ 255 sec.

Dimensions



Specifications

Physical Characteristics	Mounting	DIN-rail mounting and desk / wall mounting
	Dimensions (W x H x D)	232 x 65 x 138.4 mm (9.1" x 2.5" x 5.4")
	Weight	2.3 kg / 5.07 lb
Environment	Temperature	-10 ~ 45° C (14 ~ 113° F), Operating
	Temperature (with industrial grade components)	-15 ~ 55° C (5 ~ 131° F), Operating
	Relative Humidity	95% @ 40° C (non-condensing), Operating
	Vibration Resistance	1 Grm, IEC 60068-2-64, Random, 5-500 Hz, 1 Oct/min, 1hr/axis
	Shock Resistance	40 G, IEC 60068-2-27,half sine,11 ms , Operating
Software Development Kit	Operating System	Supports Microsoft Windows XP with SP2, XP Embedded and Win 2000
	Demo Program	Complete demo program with VC++ sample code for reference

Ordering Information

IDE Interface

Part Number	Memory	WLAN	Video Input
DVS-355-MU25E	-	-	6 channels
DVS-355-ZU25E	-	802.11 b/g	-
DVS-355-SU25E	-	-	-

SATA Interface

Part Number	Memory	WLAN	Video Input
DVS-355-MU25SE	-	-	6 channels
DVS-355-ZU25SE	-	802.11 b/g	-
DVS-355-SU25SE	-	-	-

Optional Items

2.5" Hard Drive Options

Part Number	RPM	Type	Capacity
96ND60G-I-FJ4K1	4200	IDE Parallel-ATA	60 GB
96ND80G-I-FJ4K1	4200	IDE Parallel-ATA	80 GB

Power Adapter Options

Part Number	Description
1757000222	AC-to-DC Adapter 2-pin DC 19 V/3.42 A/65 W, with Phoenix Power Plug
9689000450	AC-to-DC Adapter 3-pin DC19V/3.16A/ 60W

Power Cord Options

Part Number	Description
1700001947	2-pin 180 cm, USA
1700001948	2-pin 180 cm, Europe
9689071001	3-pin 180 cm, USA
9689071002	3-pin 180 cm, Eruope

Industrial-Grade CompactFlash Card Options

Part Number	Capacity	Operating Temperature
96FMCFI-512M-ET-AP	512 MB	-40 ~ 85° C (-40 ~ 185° F)
96FMCFI-1G-ET-AP	1 GB	-40 ~ 85° C (-40 ~ 185° F)

Packing List

Part Number	Description	Qty
2013000000	2 year warranty card	x 1
2062S35000	Driver CD	x 1
1700001394	DC Jack with 2-pin pluggable terminal block	x 1
1700060202	Y cable for KB and PS/2 Mouse	x 1
1700005791	Video In Cable D-Sub to BNC (DVS-355-MU25E only)	x 1

DVS-500

Industrial Compact Platform for PC Based DVR

Features

- Cost-effective advanced performance platform supports Intel® Core™ 2 Duo/ Pentium® D/Pentium® 4/Celeron® D Processors
- Compact, robust, and flexible, with ATX/Micro ATX/Mini-ITX motherboard
- Compatibility and certification tested for various video capture cards
- Advanced thermal and acoustic design for DVR
- Optional remote control module with direct keyboard mapping
- Supports 4/8/16 MPEG-4/H.264 video capture

ADVANTECH CTOS Configure To Order Services | Windows Embedded | RoHS COMPLIANT 2002/95/EC

Introduction

The DVS-500 is a high performance video surveillance platform with a compact industrial chassis. It includes an optimized cooling system design that improves the thermal environment when installing multiple video capture cards and hard drives, along with lowered acoustic impact. Combined with long-life industrial main boards, the DVS-500 provides a wide range of performance levels from Celeron D to Core 2 Duo processors. The optional remote control module helps the system integrator integrate this convenient interactive functionality with DVR applications. Advantech's quality assurance integration tests and certifications for different video capture cards assure system reliability even for 24/7 operation. The compact size, low sound profile, and rugged design make it the ideal platform for retail, community, factory, or small and medium enterprise applications.

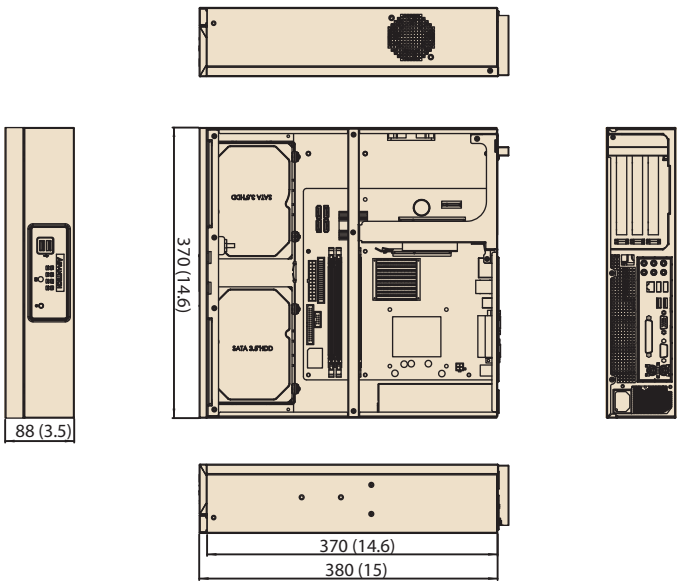
Specifications

Processor System	Chipset	Intel 945G + ICH7	
	CPU* (configurable)	LGA775 Intel Core 2 Duo/Pentium D/Pentium 4/Celeron D	
	Front Side Bus	533/800/1066 MHz	
	L2 Cache	4 MB/2 MB (Core 2 Duo), 4 MB/2 MB (Pentium D), 2 MB/1 MB (Pentium 4), 512 KB/256 KB (Celeron D)	
	Memory* (configurable)	Supports up to 4 GB Dual Channel 240-pin, DIMM x 4, DDR2 667/533 MHz	
Graphics	Controller	Intel 82945G GMCH integrated Graphics Media Accelerator 950	
	VRAM	Intel DVMT 3.0 dynamically shared system memory up to 224 MB memory	
Expansion Slots	PCI	2 x 32-bit /33 MHz PCI, 1 extra slot reserved for DIO module	
Storage	Hard Disk Drive* (configurable)	3.5" SATA HDD, with advanced thermal design	
	Capacity	2 HDD	
Ethernet	Interface	10/100/1000 Mbps Gigabit Ethernet	
	Controller	GbE LAN: Intel 82573L	
I/O Ports	Front I/O Ports	2 x USB, IR remote control (upon request), 8 x Configurable Notification LEDs (upon request)	
	Rear I/O Ports	1 x VGA, 1x RJ45 with LED connector, 1 x COM (RS-232), 4 x USB2.0, 1 x Parallel (SPP/EPP/ECP), 1 x PS/2 Keyboard, 1 x PS/2 Mouse, 3 x Audio I/O (MIC-In, Line-In, Line-Out)	
Power Supply*	Power Output Wattage	220 W	
	Type	Single ATX power supply with full range	
Cooling	Chassis Fan	1 (18.15 CFM)	
	Air Filters	2 (110 x 44 mm)	
Acoustic Noise		Less than 39 dB sound pressure at 5 ~ 28° C (41 ~ 82° F)	
Environment	Temperature	Operating	Non-Operating
		0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C non-condensing	10 ~ 95% @ 40° C non-condensing
Physical Characteristics	Color	Black	
	Dimensions (W x H x D)	370 x 88 x 370 mm (14.6" x 3.5" x 14.6")	
	Weight	8.3 kg (18.3 lb)	
Operating System*	Microsoft Windows XP/2000, Windows XP Embedded		

* Configurations vary by region. Please contact the Advantech sales force or refer to the CTOS DVR Platform for more details.

Dimensions

Unit: mm (inch)



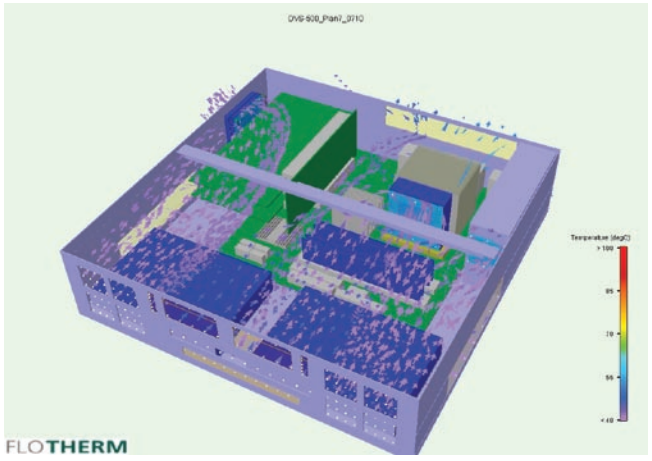
Configure to Order Services

Please visit Advantech CTOS portal for order entry
http://www.advantech.com.tw/CTOS

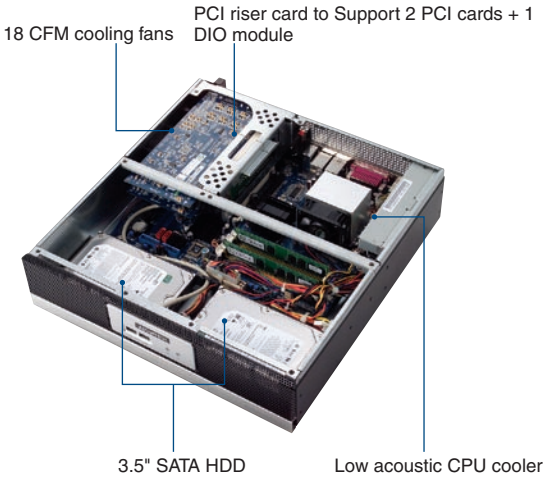
System Content

Item	Description
Chassis	Compact PC Based Chassis
Motherboard	Intel 945G + ICH7 Motherboard*
Power system	220 W ATX
CPU cooler	LGA775 UP to Pentium-4 3.0 GHz (90 nm, 85 W, L2: 2 MB)

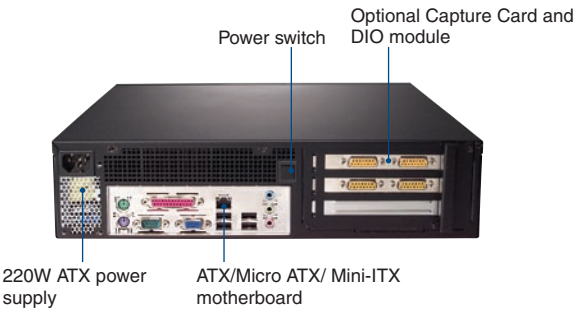
* Configurations vary by region. Please contact the Advantech sales force or refer to the CTOS DVR Platform for more details.



Advanced thermal design for better reliability



DVS-500 Internal View



DVS-500 Rear Panel

Optional Certified Video Capture Card and DIO module

Part Number	Description
DVP-7010BE	4 CH D1 @ 30 fps PCI MPEG4 Software Encode Video Capture Card with SDK
DVP-7020BE	4 CH D1 @ 120 fps PCI MPEG4 Software Encode Video Capture Card with SDK
DVP-7421BE	4 CH D1 @ 120 fps PCI MPEG1/2/4 Hardware Codec Video/Audio Capture Card with SDK
96OT-DS-4004HCI	4 CH 2CIF @ 120 fps/D1 @ 60 fps PCI H.264 Hardware Encode Video/Audio Capture Card with SDK
96OT-DS-4008HCI	8 CH 2CIF @ 240 fps/D1 @ 120 fps PCI H.264 Hardware Encode Video/Audio Capture Card with SDK
9692080400E	4 x DO + 4 x DI module for DVP-7010BE, DVP-7020BE and DVP-7421BE
9698080500E	8 x DI module for DVP-7010BE, DVP-7020BE
9658050000E	Direct Keyboard Mapping IR Remote Control Module Kit (upon request)

Ordering Information

Model name	Description	Configuration	Key Parts (configurable)
DVS-500-945G-4SB1	4 CH D1 @ 30 fps MPEG4 S/W Encode DVR Platform with SDK	DVS-500-945G 1 x DVP-7010BE	1 x 3.0 GHz Pentium 4 (Default) 2 x 512 DDR2 RAM (Default) 1 x 500 GB SATA HDD (Default)
DVS-500-945G-4SB	4 CH D1 @ 120 fps MPEG4 S/W Encode DVR Platform with SDK	DVS-500-945G 1 x DVP-7020BE	
DVS-500-945G-8SB1	8 CH D1 @ 60 fps MPEG4 S/W Encode DVR Platform with SDK	DVS-500-945G 2 x DVP-7010BE	
DVS-500-945G-4H	4 CH D1 @ 120 fps MPEG4 H/W Video/Audio Codec DVR platform with SDK	DVS-500-945G 1 x 7421BE	
DVS-500-945G-8H	8 CH D1 @ 240 fps MPEG4 H/W Video/Audio Codec DVR platform with SDK	DVS-500-945G 2 x 7421BE	
DVS-500-945G-4HK	4 CH 2CIF @ 120 fps/D1 @ 60 fps H.264 H/W Video/Audio Encode DVR Platform with SDK	DVS-500-945G 1 x 96OT-DS-4004HCI	
DVS-500-945G-8HK	8 CH 2CIF @ 240 fps/D1 @ 120 fps H.264 H/W Video/Audio Encode DVR Platform with SDK	DVS-500-945G 1 x 96OT-DS-4008HCI	
DVS-500-945G-16HK	16 CH 2CIF @ 480 fps/D 1 @ 240 fps H.264 H/W Video/Audio Encode DVR Platform with SDK	DVS-500-945G 2 x 96OT-DS-4008HCI	
DVS-500-945GE	Compact Size DVR Platform with 945G Motherboard, Advanced CPU Cooler, 220W Power and 1 x System Fan		N/A

DVS-510

1U Compact Size Digital Video Platform

Features

- Supports Intel® Core™ Duo and Core Solo Mobile Processors
- 4-channel PCIe video input with D1 and 120/100 FPS
- Supports video loop through function
- 6 inputs and 7 outputs for GPIO alarm
- Dual Display support: VGA, DVI and TV-OUT
- Supports Windows® 2000/XP with drivers and SDK

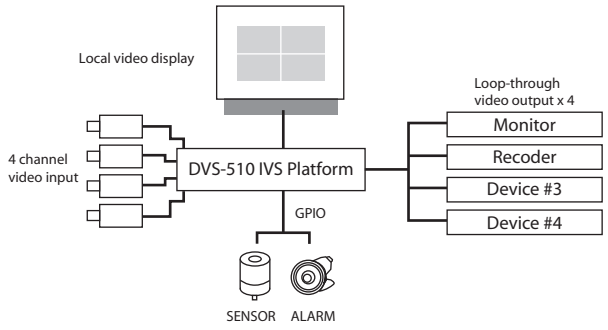
Introduction

The DVS-510 is a PC-Based Digital Video platform built into a 1U, compact industrial grade chassis. The platform integrates four Conxant BT-878 video capture chips with a PCIe interface that supports 4D1 and 100/120 full frame rates. The Intel Core Duo technology gives it excellent computing power for video encoding, streaming or intelligent video analysis. Combined with a 4-channel loop through video, dual-Giga LAN and the GPIO, it is the ideal platform for an intelligent video analysis box (IVS BOX), high-end video server, Network Video Recorder (NVR), POS integrated DVR, signage integrated DVR, or any other advanced video-integrated application.

Specifications

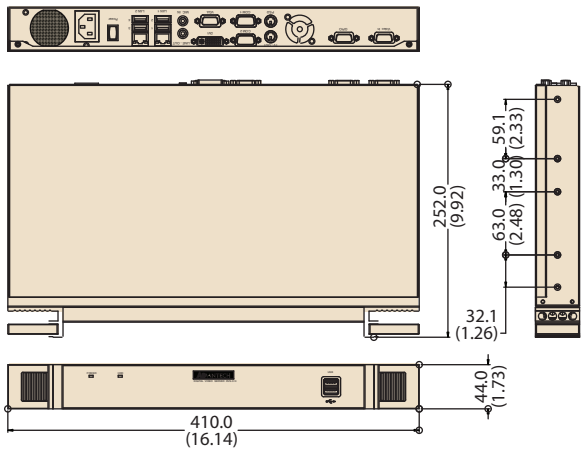
CPU	Supports Intel® µFC-PGA 478 Core™Duo/Celeron® M with 65nm process technology
FSB	400/533/667 MHz
System Chipset	Intel 945 GM Intel ICH7M-DH
Video Input	D-sub connector with 4-channel video inputs and 4 video loop through outputs
Memory	Dual channel memory architecture 2 x SODIMM. 2 GB DDR2 667/533/400 non-ECC, unbuffered memory
HDD interface	One Enhanced IDE interface supports up to 2 IDE devices. Ultra DMA 100 mode up to 100 MB /sec. 2 SATA ports support up to 150 MB/sec.
Serial Ports	2 serial ports; COM1: RS-232, COM2: RS-232/422/485
USB	6 USB 2.0 compliant (front panel x2 and rear panel x4)
Keyboard/Mouse Connector	6-pin mini-DIN connector for PS/2 Keyboard connector
GPIO	15-bit GPIO; D-Sub connector with 6 inputs and 7 outputs
VGA/LCD Interface	Intel Graphics Media Accelerator 950
DVI	1 Digital DVI
TV Out	Supports composite video output
Dual Display Combination	VGA; DVI; TV out
Ethernet Interface	Dual Marvell 88E8053 PCIe Gigabit LAN Controller, featuring AI NET2
Audio Interface	AC97 2.3 compliant
Mini PCI	1
External I/O connector	1 x VGA; 1 x DVI; 1 x TV-out 2 x COM1 x mini-DIN PS/2 connector for Keyboard and mouse 1 x MIC IN; 1 x LINE out 2 x RJ-45; 2 x USB 2.0/1.1 (front panel) 4 x USB 2.0/1.1 (rear panel) 1 x Video IN (D-sub connector) 1 x GPIO (D-sub connector)
Operating Temperature	-15° C ~ 50° C (5 ~ 122° F)
External Power Terminal	ATX power connector
Software OS support	Windows 2000, XP Windows CE.Net 5.0, XPe, Linux
Vibration	0.002G²/Hz, 1 Grms, 5-500Hz
Dimensions (W x H x D)	410 x 44 x 252 mm (16.14" x 1.73" x 9.92")
Certifications	CE / FCC part 15 Class A / UL

Application Reference for Intelligent Video Surveillance



Dimensions

Unit: mm (inch)



Ordering Information

Part Number	HDD Support	Video Input	CPU Support
DVS-510-35IKE	3.5" HDD Tray	4	Intel 478-pin Micro FCPGA Core Duo/Celeron M up to 2.0 GHz

Optional Items

CPU

Part Number	Description	TDP	FSB	L2
96MPDM-20F6-2M4T	Core Duo T2500 2 GHz, 478-pin Micro FCPGA	31.0W	667 MHz	2 MB
96MPDM-18F6-2M4T	Core Duo T2400 1.83 GHz, 478-pin Micro FCPGA	31.0W	667 MHz	2 MB
96MPDM-16F6-2M4T	Core Duo T2300 1.66 GHz, 478-pin Micro FCPGA	31.0W	667 MHz	2 MB
96MPSM-16F6-2M4T	Core Solo T1300 1.66 GHz, 478-pin Micro FCPGA	27.0W	667 MHz	2 MB

Memory

Part Number	Description	Clock
96SD2I-512M66NN-AP	512 MB SODDR2 200P 64 x 8 I GRD(G)	667 MHz
96SD2I-1G667NN-AP	1 GB SODDR2 200P 64 x 8 I GRD(G)	667 MHz
96SD2I-512M53NN-AP	512 MB SODDR2 200P 64 x 8 I GRD(G)	533 MHz
96SD2I-1G533NN-TR	1 GB SO-DDR2200P 64 x 8 I GRD(G)	533 MHz

Power Cord

Part Number	Description
1702002600	POWER Cable UL/CSA (USA) 180D 125V 10A 1.83M
1702002605	POWER CABLE 90D 220VEUROPEAN 250V/6A (FRANCE1.8M)

CPU Load Performance

4-channel video encoding and preview

Frames per Second / Display Resolution	30 Core Duo 2.0 GHz/2 MB	15 Core Duo 2.0 GHz/2 MB	10 Core Duo 2.0 GHz/2 MB
D1 (720 x 480)	-	60% ~ 70%	-
VGA (640 x 480)	-	55% ~65%	-
QVGA (320 x 240)	25% ~ 35%	-	-
SubVGA (160 x 120)	5% ~ 15%	-	-

2-channel video encoding and preview

Frames per Second / Display Resolution	30 Core Duo 2.0 GHz/2 MB	15 Core Duo 2.0 GHz/2 MB	10 Core Duo 2.0 GHz/2 MB
D1 (720 x 480)	60% ~ 70%	-	-
VGA (640 x 480)	55% ~ 65%	-	-
QVGA (320 x 240)	-	-	-
SubVGA (160 x 120)	-	-	-

1 channel video encoding and preview

Frames per Second / Display Resolution	30 Core Duo 2.0 GHz/2 MB	15 Core Duo 2.0 GHz/2 MB	10 Core Duo 2.0 GHz/2 MB
D1 (720 x 480)	30% ~ 40%	-	-
VGA (640 x 480)	25% ~ 35%	-	-
QVGA (320 x 240)	-	-	-
SubVGA (160 x 120)	-	-	-