



298.00 EUR  
incl. 19% VAT, plus [shipping](#)



New. 2 years warranty.

Scope of supply :

- Kontron KT690/mITX Mainboard
- I/O shield

Form factor KT690/mITX, KT690/mITX-FW and KT690/mITX (BGA): mini ITX (170.18 x 170.18mm) Processor • Support for Mobile AMD Sempron™, AMD Turion™ 64 and AMD Turion™ 64 X2 Mobile Processors for S1 socket. (KT690/mITX and KT690/mITX-FW only). o 35W maximum TDP o 6.4GB/s HyperTransport™ link, 800 MHz, 16bit/16bit o Hypertransport™ 1.0 Tunnel (I/O Bus) speed of 800MHz o Internal L1 cache of 128KB (Single core CPUs) / 128KB x2 (Dual core CPUs) o Internal L2 cache of 128/256/512KB (Single core CPUs) / 512KB x2 (Dual core CPUs) o Processor technology of 65nm / 90nm • Support for AMD Sempron™ BGA Single Core 210U (KT690/mITX (BGA) only). o 15W maximum TDP o Up to 6.4GB/s peak HyperTransport™ link, 800 MHz, 16bit/16bit o Internal L1 data cache 64KB + L1 instruction cache 64KB o Internal L2 cache of 256KB o Processor technology of 65nm • Support for AMD Athlon™ Neo X2 BGA Dual Core L325 KT690/mITX (BGA) only. o 18W maximum TDP o Up to 6.4GB/s peak HyperTransport™ link, 800 MHz, 16bit/16bit o Internal L1 data cache 2x 64KB + L1 instruction cache 2x 64KB o Internal L2 cache of 2x 512KB o Processor technology of 65nm • DDR2 memory controller and bus interface Memory • Dual Channel DDR2 memory architecture • 2 pcs DDR2 SODIMM 200pin DRAM sockets onboard. • Support DDR 400/533/667MHz unbuffered memory (PC2-3200/PC2-4200/PC2-5300) • Support system memory from 1x 256MB and up to 2 x16GB (PT only up to 2x4GB has been verified). • ECC not supported Chipset

AMD Chipset consisting of: • AMD M690T northbridge ( graphics tunnel) • ATI SB600 southbridge (I/O hub) Video • Integrated ATI Radeon™ X1200 graphics core o CRT Out connector o DVI-D connector (Digital only) o Onboard LVDS connector o TV-Out connector\*\* • Dual independent pipe support: Mirror and Dual Independent displays supported. • Full DirectX® 9.0 support • Maximum resolution of 2048x1536 @ 32bpp for a maximum pixel clock speed of 400MHz. • LVDS interface supports dual channel, 24bit OpenLDI/ SPWG panels. ( Audio Audio, 7.1 and 7.2 Channel High Definition Audio Codec using the Realtek ALC888 codec • Line-out and Line-in • Surround output: SIDE, LFE, CEN, BACK and FRONT • Microphone: MIC1, MIC2 • CDROM in • SPDIF Interface Onboard speaker I/O Control Winbond W83627DHG LPC Bus I/O Controller Peripheral interfaces • Six USB 2.0 ports on I/O area • Four USB 2.0 ports on internal pinrows • Two Serial ports (RS232) • One Parallel port, SPP/EPP/ECP • One Floppy port • Four Serial ATA-300 IDE AHCI interfaces • One PATA 66/100/133 interface with support for 2 devices • CF (Compact Flash) interface (KT690/mITX only) supporting CF type I and II. (UDMA2 max.). Note that only one PATA device is supported when CF is used and only by use of 40-wire cable (not 80-wire cable). Optionally use SATA devices. • Two IEEE 1394-1995/ 1394a-2000 OHCI Firewire ports supporting speeds of 100 Mbits/s, 200 Mbits/s, and 400 Mbits/s (KT690/mITX-FW only) • PS/2 keyboard and mouse ports LAN Support • 2x 10/100/1000Mbits/s LAN using o Realtek RTL8111B PCIe controllers on KT690/mITX and KT690/mITX-FW o Intel® Hartwell 82574L PCIe controllers on KT690/mITX (BGA) • RPL/PXE netboot supported. Wake On LAN (WOL) supported BIOS • Kontron Technology / AMI BIOS (core version 8.00) • Support for Advanced Configuration and Power Interface (ACPI 1.0b), Plug and Play o Suspend To Ram (S3) o Suspend To Disk (S4) • Support for Cool'n'Quiet™ • Secure CMOS/ OEM Defaults, "Always On" power setting, Forced Boot device. • Desktop Management Interface (DMI) • Support for addition of System Locked Preinstallation (SLP) key in BIOS • RAID Support (RAID modes 0, 1, and 10) (for Linux O/S limitations may apply) • TPM onboard Expansion Capabilities • PCI Bus routed to PCI slot(s) (PCI Local Bus Specification Revision 2.3) o KT690/mITX: 1 slot PCI 2.3, 32 bits, 33 MHz, 5V compliant • PCI-Express bus routed to PCI Express slot(s) (PCI Express 1.1a) o KT690/mITX: 1 slot PCI-Express x16 with PCI-Express x8 support • Mini PCI-Express routed to mini PCI-Express connector Support for Mini PCI-Express modules with no components on backside. • SMBus routed to FEATURE, PCI slot, PCI Express and mini-PCI Express connectors • LPC Bus routed to TPM connector • DDC Bus routed to LVDS and CRT connector • 8 x GPIOs (General Purpose I/Os) routed to FEATURE connector Hardware Monitor Subsystem • Smart Fan control system, support Thermal® and Speed® cruise for three onboard Fan control connectors: FAN\_CPU, FAN\_SYS and FEATURE • Three thermal inputs: CPU die temperature, System temperature and External temperature input routed to FEATURE connector. (Precision +/- 3°C) • Voltage monitoring • Intrusion detect input • SMI violations (BIOS) on HW monitor not supported. Supported by API. Operating Systems Support • Win7 • WinXP • Windows Vista • Windows 2003 • WinXP Embedded • Linux: Feodora Core 8 Environmental Conditions Operating: 0°C – 60°C operating temperature (forced cooling). It is the customer's responsibility to provide sufficient airflow around each of the components to keep them within allowed temperature range. 10% - 90% relative humidity (non-condensing) Storage: -20°C – 70°C 5% - 95% relative humidity (non-condensing) Electro Static Discharge (ESD) / Radiated Emissions (EMI): All Peripheral interfaces intended for connection to external equipment are ESD/ EMI protected. EN 61000-4-2:2000 ESD Immunity EN55022:1998 class B Generic Emission Standard. Safety: UL 60950-1:2003, First Edition CSA C22.2 No. 60950-1-03 1st Ed. April 1, 2003 Product Category: Information Technology Equipment Including Electrical Business Equipment Product Category CCN: NWGQ2, NWGQ8 File number: E194252 Theoretical MTBF: 234,251 hours or 26.7 years @ 40°C ambient air temperature 135,169 hours or 15.4 years @ 60 °C ambient air temperature Restriction of Hazardous Substances (RoHS): All boards in the KT690 family are RoHS compliant. Capacitor utilization: No Tantal capacitors on board Only Japanese brand Aluminium and solid electrolytic capacitors rated for 100°C used on board Battery Exchangeable 3.0V Lithium battery for onboard Real Time Clock and CMOS RAM. Manufacturer Panasonic / Part-number CR2032NL/LE, CR-2032L/BE or CR-2032L/BN Expected minimum 5 years retention varies depending on temperature, actual application on/off rate and variation within chipset and other components. Approximately current draw is 3µA (no PSU connected). CAUTION: Danger of explosion if the battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.