

XTX™ Module

High graphics performance with low power consumption

conga-XAF

Based on AMD Embedded G-Series Processors

Best price/performance ratio

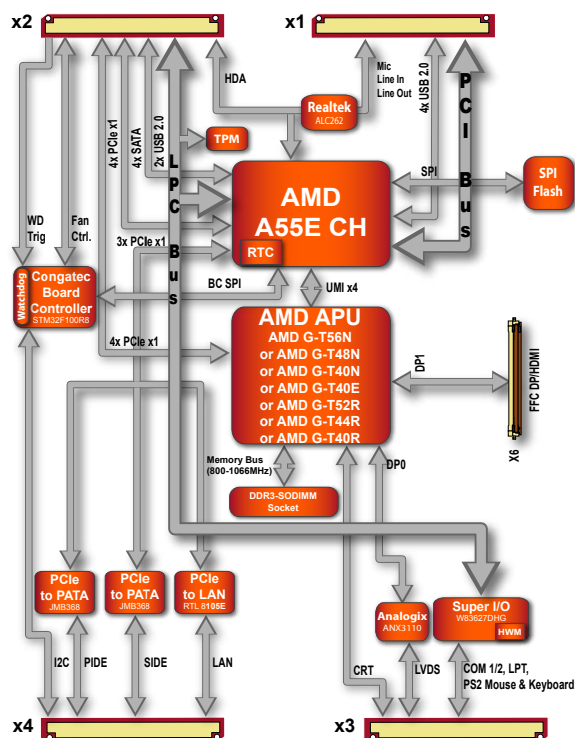
High performance graphics



Formfactor	ETX® Spec 2.7. without ISA Support, XTX™ Extensions
CPU	AMD Embedded G-Series Processors AMD G-T56N 1.6 GHz Dual Core (L1 cache 64KB, L2 cache 512kB x2, 18 W) AMD G-T52R 1.5 GHz Single Core (L1 cache 64KB, L2 cache 512kB, 18W) AMD G-T40R 1.0 GHz Single Core (L1 cache 64KB, L2 cache 512kB, 5.5 W) AMD G-T40E 1.0 GHz Dual Core (L1 cache 64KB, L2 cache 512kB x2, 6.5 W)
DRAM	Single channel up to one 4 GB DDR3 SO-DIMM memory (up to 1066 MHz)
Chipset	AMD A55E Controller Hub
Ethernet	10/100M Fast Ethernet, Realtek RTL8105E
I/O Interfaces	4x PCI Express™ x1 lanes, 4x Serial ATA*, 2x EIDE (up to UDMA-66/100), 6x USB 2.0, PCI Bus (Rev. 2.3 compliant, 33 MHz), 2x Express Card, LPC Bus, I²C (Fast Mode, 400 kHz Multi Maser), Floppy, LPT, 2x COM, PS/2
Sound	High Definition Audio Interface and Analog MIC, Line In, Line Out by on-module HDA codec
Graphics	Integrated High Performance Video, DirectX™11 graphics with UVD 3.0, Integrated VGA DAC, Dual Simultaneous Display Support, no PEG support
LVDS	2x24 Bit, 800x600 to 1920x1200@60Hz; VESA standard or JEDIA data mapping; Automatic Panel Detection via EDID/EPI
DisplayPort	1x DisplayPort 1.1a shared with HDMI port, resolutions up to 2560x1600 - 18W APU, 1920x1200 - 9W APU
HDMI or DVI	1x HDMI 1.3 Port, shared with DisplayPort, resolutions up to 1920x1080 / 1920x1200 for DVI mode
CRT	400 MHz RAMDAC, resolutions up to 2560x1600 - 18W APU, 1920x1200 9W APU
congatec Board Controller	Multi Stage Watchdog, non-volatile User Data Storage, Manufacturing and Board Information, Board Statistics, BIOS Setup Data, Backup, I²C bus (fast mode, 400 kHz, multi-master), Power Loss Controll
Embedded BIOS Features	AMI-Aptio UEFI BIOS with congatec Embedded BIOS features
Security	The conga-XAF can be optionally equipped with a discrete "Trusted Platform Module" (TPM). It is capable of calculating efficient hash and RSA algorithms with key lengths up to 2,048 bits and includes a real random number generator. Security sensitive applications such as gaming and e commerce will benefit also with improved authentication, integrity and confidence levels.
Power Management	ACPI 3.0 with battery support
Operating Systems	Microsoft® Windows8, Microsoft® Windows7, Microsoft® Windows XP, Microsoft® Windows® embedded Standard, Microsoft® Windows CE 6.0, Windows Embedded Compact 7, Linux
Power Consumption	Typ. application: 9 .. 18 W., see manual for full details, CMOS Battery Backup
Temperature	Operating: 0 .. +60°C Storage: -20 .. +80°C
Humidity	Operating: 10 - 90% r. H. non cond. Storage: 5 - 95% r. H. non cond.
Size	95 x 114 mm (3.7" x 4.5")

Block Diagram conga-XAF

Order Information conga-XAF



Article	PN	Description
conga-XAF/T56N	041031	AMD G-Series dual core processor T56N 1.6GHz, 1MB L2 cache and 1066MT/s DDR3 SODIMM memory interface for up to 4GB.
conga-XAF/T52R	041034	AMD G-Series single core processor T52R 1.5GHz, 512kB L2 cache and 1066MT/s DDR3 SODIMM memory interface for up to 4GB.
conga-XAF/T44R	041035	AMD G-Series single core processor T44R 1.2GHz, 512kB L2 cache and 1066MT/s DDR3 SODIMM memory interface for up to 4GB.
conga-XAF/T40E	041037	AMD G-Series dual core processor T40E 1.0GHz, 6.5W, 1MB L2 cache and 1066MT/s DDR3 SODIMM memory interface for up to 4GB.
conga-XAF/HSP-B	041050	Standard Heatspreader. All stand-offs are with 2.7mm bore hole.
conga-XAF/HSP-T	041051	Standard Heatspreader. All stand-offs are M2.5mm threaded.
conga-XAF/CSP-B	041055	Standard passive cooling solution for modules conga-XAF and EAF. All standoffs are with 2.7mm bore hole.
conga-XAF/CSP-T	041056	Standard passive cooling solution for modules conga-XAF and EAF. All standoffs are M2.5mm thread.
conga-XAF/CSA-B	041057	Standard active cooling solution for modules conga-XAF and EAF. Integrated 12V fan. All standoffs are with 2.7mm bore hole.
conga-XAF/CSA-T	041058	Standard active cooling solution for modules conga-XAF and EAF. Integrated 12V fan. All standoffs are M2.5mm thread.
DDR3-SODIMM-1333 (1GB)	068751	DDR3 SODIMM memory module with 1333 MT/s (PC3-10600) and 1GB RAM
DDR3-SODIMM-1333 (2GB)	068761	DDR3 SODIMM memory module with 1333 MT/s (PC3-10600) and 2GB RAM
DDR3-SODIMM-1333 (4GB)	068764	DDR3 SODIMM memory module with 1333 MT/s (PC3-10600) and 4GB RAM

Engineering Tools / Accessories for XTX®

conga-Xeval	019482	Evaluation carrier board for XTX-modules
conga-XKIT	077441	XTX-Starterkit with conga-XEVAL, conga-Xdebug, conga-FPA2, conga-XDVI, Power supply, USB-Stick, ...Without XTX-module
conga-XDVI	098637	Evaluation platform to convert SDVO to DVI-D
conga-Xdebug	041784	XTX debugging platform. Including cable for COM, PS/2 and VGA
conga-FPA2	047250	Flatpanel prototype adapter to develop your own flatpanel adapter Including cables set
XTX/ETX-baseboard-socket-3	400006	Connector for ETX and XTX carrier boards, height 3.0 mm, packing unit 8 pieces
XTX/ETX-baseboard-socket-9.5	400009	Connector for ETX and XTX carrier boards, height 9.5 mm, packing unit 8 pieces
conga-LDVI/EPI	011115	LVDS to DVI adapter board for digital fi at panels with a graphics resolution up to 1280x1024 pixel