## conga-XAF

# High graphics performance with low power consumption

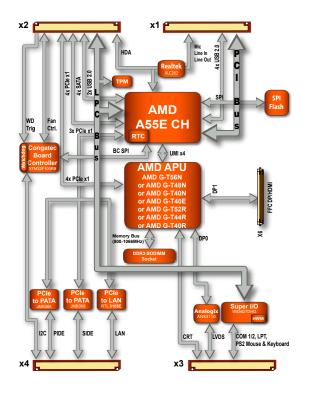


- Based on AMD Embedded G-Series Processors
- Best price/performance ratio
- High performance graphics



Formfactor	ETX® Spec 2.7. without ISA Support   XTX <sup>™</sup> Extensions							
CPU	AMD Embedded G-Series Processors							
	AMD G-T56N AMD G-T52R AMD G-T40R AMD G-T40E	1.6 GHz 1.5 GHz 1.0 GHz 1.0 GHz	Dual Core Single Core Single Core Dual Core	L1 cache 64KB L1 cache 64KB L1 cache 64KB L1 cache 64KB	L2 cache 512kB x2 L2 cache 512kB L2 cache 512kB L2 cache 512kB x2	TDP 18 W TDP 18 W TDP 5.5 W TDP 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 ExpressTM 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   I <sup>2</sup> C (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 I <sup>2</sup> C 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")							

#### conga-XAF | Block diagram



### **conga-XAF** | Order Information

PN	Description		
041031	AMD G-Series dual core processor T56N 1.6GHz   1MB L2 cache and 1066MT/s DDR3 SODIMM memory interface for up to 4GB		
041033	AMD G-Series dual core processor T40N 1.0GHz   1MB L2 cache and 1066MT/s DDR3 SODIMM memory interface for up to 4GB		
041034	AMD G-Series single core processor T52R 1.5GHz   512kB L2 cache and 1066MT/s DDR3 SODIMM memory interface for up to 4GB		
041035	AMD G-Series single core processor T44R 1.2GHz   512kB L2 cache and 1066MT/s DDR3 SODIMM memory interface for up to 4GB		
041036	AMD G-Series single core processor T40R 1.0GHz   5.5W   1MB L2 cache and 1066MT/s DDR3 SODIMM memory interface for up to 4GB		
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		
041050	Standard heatspreader for XTX module conga-XAF and EAF. All standoffs are with 2.7mm bore hole		
041051	Standard heatspreader for XTX module conga-XAF and EAF. All standoffs are M2.5mm thread		
041055	Standard passive cooling solution for modules conga-XAF and EAF. All standoffs are with 2.7mm bore hole		
041056	Standard passive cooling solution for modules conga-XAF and EAF. All standoffs are M2.5mm thread		
041057	Standard active cooling solution for modules conga-XAF and EAF. Integrated 12V fan. All standoffs are with 2.7mm bore hole		
041058	Standard active cooling solution for modules conga-XAF and EAF. Integrated 12V fan. All standoffs are M2.5mm thread		
068750	DDR3 SODIMM memory module with 1066MT/s and 1GB RAM		
068755	DDR3L SODIMM memory module with 1600 MT/s (PC3L-12800S) and 2GB RAM		
068756	DDR3L SODIMM memory module with 1600 MT/s (PC3L-12800S) and 4GB RAM		
	041031 041033 041034 041035 041036 041037 041050 041055 041055 041055 041057 041058 068750 068755		

#### Accessories

conga-Xeval	019482	Evaluation carrier board for XTX-modules			
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 fl at panels with a graphics resolution up to 1280x1024 pixel			

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