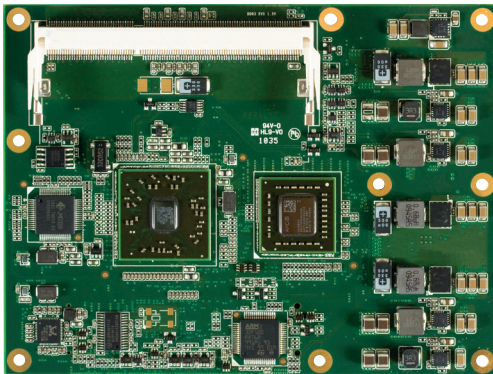


# HIGH GRAPHICS PERFORMANCE WITH LOW POWER CONSUMPTION

## conga-BAF

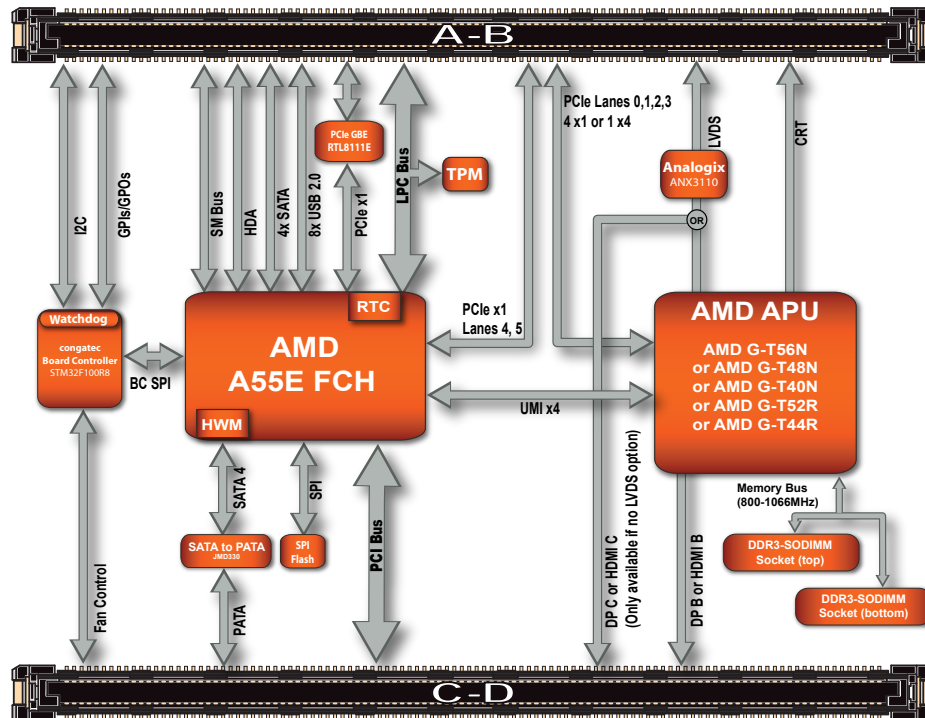


- Based on AMD Embedded G-Series Processors
- Best price/performance ratio
- High performance graphics



Formfactor	COM Express™ Basic   (95 x 125 mm)   Type II Connector Layout				
CPU	AMD G-T56N	1.6 GHz	Dual Core	cache 512 kB x2	18W
	AMD G-T40N	1.0 GHz	Dual Core	cache 512 kB x2	9W
	AMD G-T44R	1.2 GHz	Single Core	cache 512 kB	9W
	AMD G-T40R	1.0 GHz	Single Core	L2 cache 512 kB	5.5W
	AMD G-T40E	1.0 GHz	Dual Core	L2 cache 512 kB x2	6.4W
	AMD Embedded G-Series Processors				
DRAM	Single channel up to two 4 GB DDR3 SO-DIMM memory (up to 1066 MHz)				
Chipset	AMD A55E Controller Hub				
Ethernet	Gigabit Ethernet   Realtek RTL8111E				
I/O Interfaces	6x PCI Express™ x1 lanes   4x Serial ATA®   1x EIDE (up to UDMA 6)   8x USB 2.0   PCI Bus (Rev. 2.3 compliant   33 MHz)   2x Express™ Card				
Sound	High Definition Audio Interface				
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	2x DisplayPort 1.1a shared with HDMI ports   second port multiplexed with LVDS resolutions up to 2560x1600 - 18W APU   1920x1200 - 9W APU				
HDMI or DVI	2x HDMI 1.3 Ports   shared with DisplayPort   second port multiplexed with LVDS   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 Control				
Embedded BIOS Features	AMI-Aptio UEFI BIOS with congatec Embedded BIOS features				
Security	The conga-BAF 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   Microsoft® Windows Embedded Compact 7   Linux				
Power Consumption	Typ. application: tbd.   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 125 mm (3.74" x 4.92")				

# conga-BAF | Block diagram



# conga-BAF | Order Information

Article	PN	Description
conga-BAF/T56N	041001	AMD G-Series Dual Core Processor T56N 1.6GHz   1MB L2 cache and 1333MT/s DDR3 SODIMM memory interface for up to 8GB
conga-BAF/T40N	041003	AMD G-Series Dual Core Processor T40N 1.0GHz   1MB L2 cache and 1066MT/s DDR3 SODIMM memory interface for up to 8GB
conga-BAF/T44R	041005	AMD G-Series Single Core Processor T44R 1.2GHz   512kB L2 cache and 1066MT/s DDR3 SODIMM memory interface for up to 8GB
conga-BAF/T40R	041006	AMD G-Series Single Core Processor T40R 1.0GHz   5.5W   1MB L2 cache and 1066MT/s DDR3 SODIMM memory interface for up to 8GB
conga-BAF/T40E	041007	AMD G-Series Dual Core Processor T40E 1.0GHz   6.5W   1MB L2 cache and 1066MT/s DDR3 SODIMM memory interface for up to 8GB
conga-BAF/HSP-B	041020	Standard passive cooling solution for module conga-BAF. All standoffs are with 2.7mm bore hole
conga-BAF/HSP-T	041021	Standard heatspreader for COM Express Basic module conga-BAF. All standoffs are M2.5mm thread
conga-BAF/CSP-B	041025	Standard passive cooling solution for module conga-BAF. All standoffs are with 2.7mm bore hole
conga-BAF/CSP-T	041026	Standard passive cooling solution for module conga-BAF. All standoffs are M2.5mm thread
conga-BAF/CSA-B	041027	Standard active cooling solution for module conga-BAF. Integrated 12V fan. All standoffs are with 2.7mm bore hole
conga-BAF/CSA-T	041028	Standard active cooling solution for module conga-BAF. Integrated 12V fan. All standoffs are M2.5mm thread
DDR3-SODIMM-1066 (1GB)	068750	DDR3 SODIMM memory module with 1066MT/s and 1GB RAM
DDR3L-SODIMM-1600 (2GB)	068755	DDR3L SODIMM memory module with 1600 MT/s (PC3L-12800S) and 2GB RAM
DDR3L-SODIMM-1600 (4GB)	068756	DDR3L SODIMM memory module with 1600 MT/s (PC3L-12800S) and 4GB RAM

## Accessories

conga-CEVAL	065749	Evaluation Carrier Board for COM Express Type 2 modules
conga-Cdebug	047854	COM-Express debugging platform. Including cable for COM   PS/2 and VGA.
conga-LDVI/EPI	011115	LVDS to DVI converter board for digital flat panels with onboard EEPROM
conga-HDMI/Display Port adapter 4k	500030	The conga-DP/HDMI adapter 4k is used for evaluation of the DP/HDMI graphics interface of x86 Qseven and COM Express modules in combination with the congatec evaluation carrier boards conga-QEVAL and conga-TEVAL. It supports full 4k display resolution.
conga-FPA2	047250	Flatpanel prototype adapter to develop your own flatpanel adapter Including cables set.
COM-Express-carrierboard-Socket-5	400007	Connector for COM-Express carrier boards   height 5mm   packing unit 4 pieces
COM-Express-carrierboard-Socket-8	400004	Connector for COM-Express carrier boards   height 8mm   packing unit 4 pieces

© 2016 congatec AG. All rights reserved.

All data is for information purposes only. Although all the information contained within this document is carefully checked, no guarantee of correctness is implied or expressed. Product names, logos, brands, and other trademarks featured or referred are the property of their respective trademark holders. These trademark holders are not affiliated with congatec AG. Rev. July 03, 2018 WME