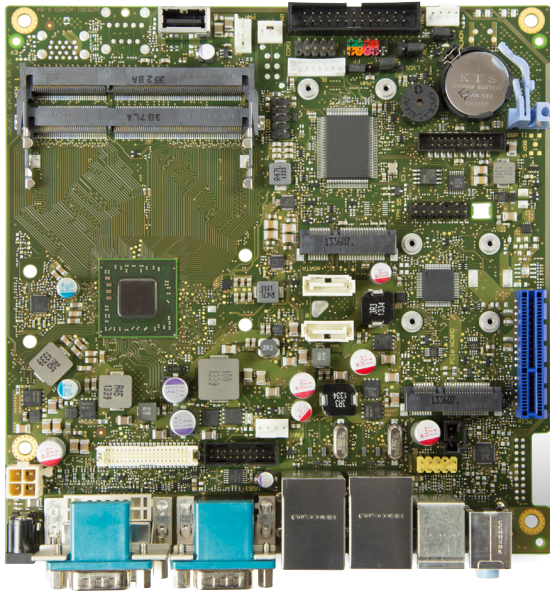


PROFESSIONAL SBC

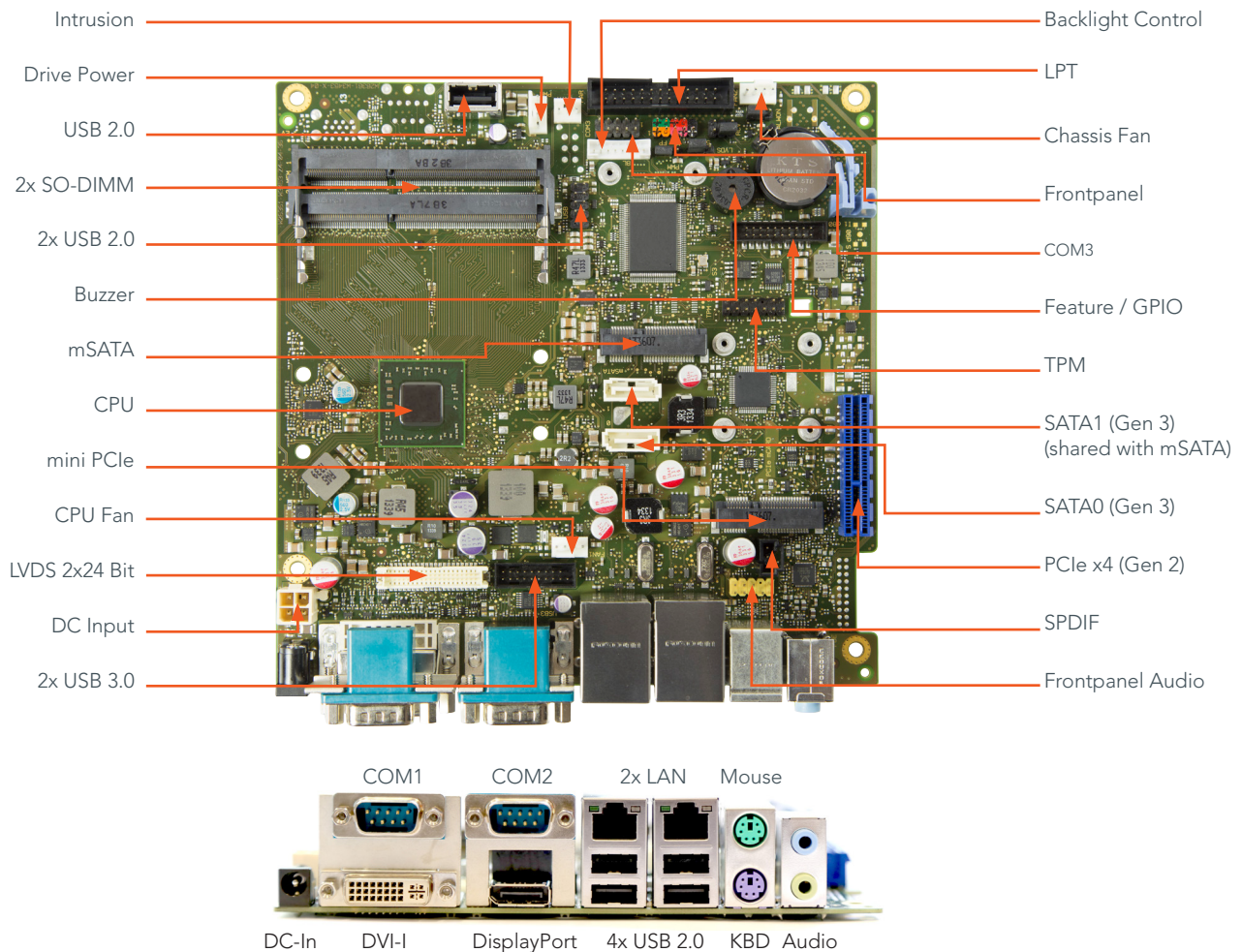
conga-IGX



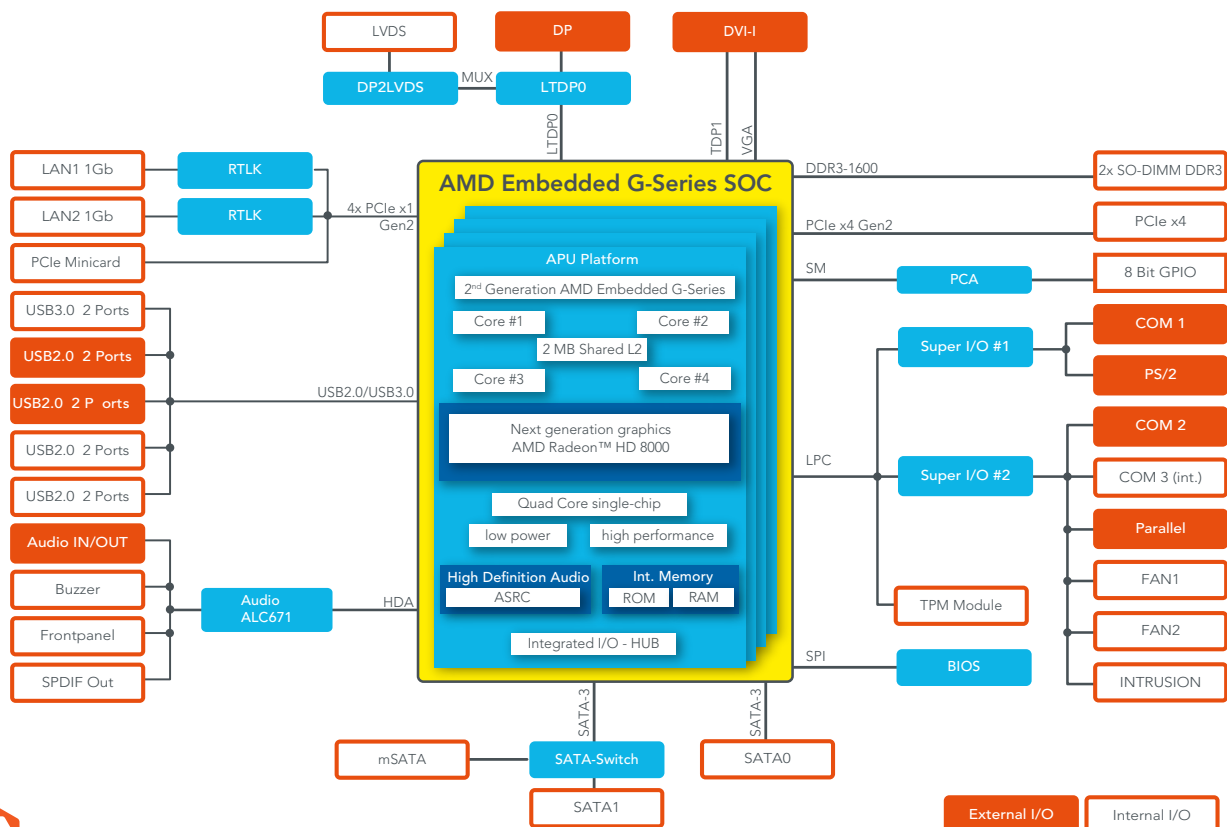
- AMD Embedded G-Series SOC (System on Chip)
- AMD integrated Radeon graphics
- Low power design for fanless or silent fan operation
- Dual range DC power supply 12V / 19-24V
- Long life components for 24/7 use

Formfactor	Professional Mini-ITX, 170 x 170 mm
CPU	AMD Embedded GX-Series Processors AMD Embedded GX-420CA 2.0 GHz Quad Core L2 cache 2MB shared AMD Radeon™ HD 8400E Graphics 600 MHz DDR3/1600 25W TDP AMD Embedded GX-217GA 1.65 GHz Dual Core L2 cache 1MB shared AMD Radeon™ HD 8280E Graphics 450 MHz DDR3/1600 15W TDP AMD Embedded GX-210HA 1.0 GHz DualCore L2 cache1MB shared AMD Radeon™ HD 8210E Graphics 300 MHz DDR3/1333 9W TDP Chipset Integrated in SOC (single-chip)
DRAM Memory	Support for 2x SO DIMM Socket (1.5V / 1.35V), max. 16GB, Single Channel DDR3-1333 (CL9) / DDR3-1600 (CL11) SDRAM, unbuffered, no ECC
Ethernet	Dual LAN Gbit / 100 Mbit / 10 Mbit; Realtek RTL 8111G
Sound	High Definition Audio Interface, Realtek ALC 671, 5.1-channel
Graphics	Integrated AMD Radeon™ HD 8000E Graphics supports DirectX 11.1, OpenGL 4.2 and OpenCL™ 1.2; up to two simultaneous displays, Unified Video Decoder 4.2 (H.264, MPEG-2, VC-1, MPEG4 and WMV), Video Compression Engine 2.0 (Video conferencing, wireless display, H.264, SVC), Security Asset Management Unit 2.1 (DRM offloaded from CPU, HDCP2)
Graphic Interfaces	18/24-bit Single/Dual Channel LVDS Interface, 1x DisplayPort, 1x DVI
Features	FAN monitores & controlled CPU / AUX1, TEMP monitored CPU ONB1 / ONB2, Silent FAN / System Guard / Silent Drives, Recovery BIOS / Desk Update / Multi Boot, HDD Password / HW Diagnostic Tool / EraseDisk / TPM (opt.), Boot Logo Option
Internal Connectors	1x PCIe x4 Slot (Gen.2), Mini PCIe Slot (incl. USB 2.0), Socket for TPM 1.2 module, 2x SATA (600), 1x mSATA (SATA-III; 600), SPDIF OUT, 2x USB 2.0, 2x USB 3.0, Specific Socket for intern. USB 2.0 Stick, Serial (FIFO, 16550 compatible = COM3), FAN CPU, System AUX1, Intrusion (Case Open), Backlight Inverter, Feature Connector (8 Bit General Purpose I/O), Frontpanel (Power Switch, LEDs, Intel 10 pin header), Onboard Power Output (+5V/2A, +12V/2A) for drives, Onboard (internal input) DC-In 12V / 19-24V
External Connectors (Frontpanel)	1x DVI, 1x DisplayPort, Audio In, Line Out, 2x LAN RJ45, PS/2 Mouse, Keyboard, 4x USB 2.0, 2x Serial (RS232, FIFO, 16550 compatible), 1x DC-In (external input) 12V / 19-24V @ 5A max.
Embedded BIOS	AMI Aptio® 4.X (UEFI) BIOS; Recovery BIOS, SM-BIOS, BIOS Update, Quick Boot, Logo Boot, Quiet Boot, integrated HW diagnostic tool, EraseDisk Option
Security	The conga-IGX 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 Specification	Power Management , ACPI S3/S4, Wake on time from S5, 12V / 19-24V (max. 5A via external DC connector / max. 10A via internal DC connector) 3.3V Auxiliary Supply Voltage on PCIe Slot (Wake-Up Support) Onboard CPU Core Voltage Regulator
Operating Systems	Microsoft® Windows 8, Microsoft® Windows 7, Linux, Microsoft® Windows® 7/8 embedded Standard, Microsoft® Windows® 7 Embedded Compact
Power Consumption	Typ. application: tbd., see manual for full details
Temperature:	Operating: 0 .. +60°C
Humidity Operating:	Operating: 10 - 90% r. H. non cond.
Size	170 x 170 mm (6.7” x 6.7”)

conga-IGX | Connectors



conga-IGX | Block diagram

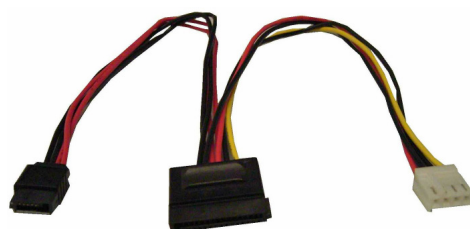
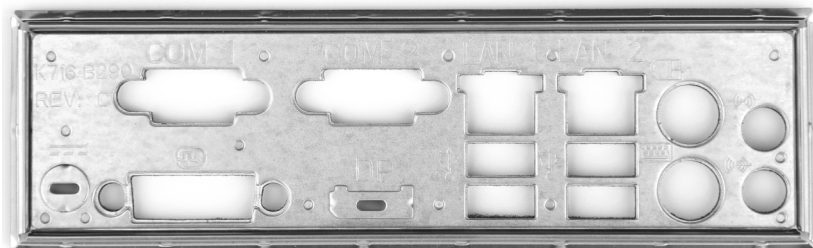
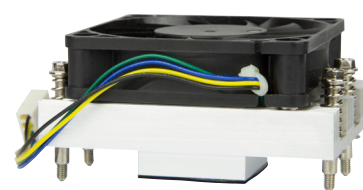
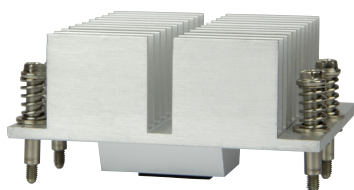


conga-IGX | Order Information

Article	PN Bulk*	PN Kit*	Description
conga-IGX/420CA	052402	052412	Mini-ITX based on AMD Embedded GX-420CA 2.0 GHz Quad-core (L2 cache 2MB shared, 25W) with AMD Radeon™ HD 8400E Graphics 600 MHz, DDR3/1600
conga-IGX/217GA	052401	052411	Mini-ITX based on AMD Embedded GX-217GA 1.65 GHz Dual-core (L2 cache 1MB shared, 15W) with AMD Radeon™ HD 8280E Graphics 450 MHz, DDR3/1600
conga-IGX/210HA	052400	052410	Mini-ITX based on AMD Embedded GX-210HA 1.0 GHz Dual-core (L2 cache 1MB shared, 9W) with AMD Radeon™ HD 8210E Graphics 300 MHz, DDR3/1333
* Bulk = Package with 20 units without accessories Kit = Single package including I/O shield, SATA cable, SATA power cable and quick start guide			

Accessories

conga-IGX power drive cable	052435	Power drive cable for SATA HDD and SATA slimline DVD (length 200 +200 mm) suitable for conga-IGX
Industrial Mini-ITX chassis	052436	Industrial Mini-ITX chassis for conga-IGX incl. illuminated power button, HDD cage with 4-pin system fan, SATA cable, power-drive-cable, stands and wallmount
conga-IGX I/O shield	052431	Three component I/O shield suitable for conga-IGX
conga-IGX Active Cooler	052432	Active cooler suitable for conga-IGX/217GA and conga-IGX/420CA
conga-IGX Passive Heatpipe Cooler	052433	Passive heatpipe cooler suitable for conga-IGX/210HA and conga-IGX/217GA
conga-IGX Passive Cooler	052434	Passive cooler suitable for conga-IGX/210HA
DDR3L Memory Module 2 GByte	668752	Certified memory module for conga-IGX - DDR3L SODIMM, 1,35V & 1,5V memory module with 1600 MT/s and 2GB RAM
DDR3L Memory Module 4 GByte	668753	Certified memory module for conga-IGX - DDR3L SODIMM, 1,35V & 1,5V memory module with 1600 MT/s and 4GB RAM
DDR3L Memory Module 8 GByte	668754	Certified memory module for conga-IGX - DDR3L SODIMM, 1,35V & 1,5V memory module with 1600 MT/s and 8GB RAM



© 2014 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. October 28, 2014 MR