

conga-IGX - Professional Single Board Computer

High graphics performance with low power consumption

conga-IGX

Professional Mini-ITX

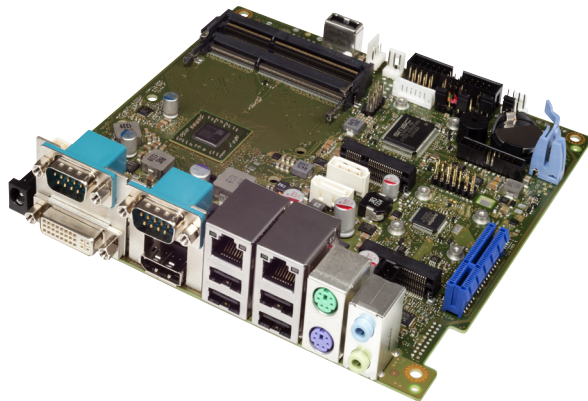
AMD Embedded G-Series SOC (System on Chip)

AMD integrated Radeon graphics

Low power design for fanless or silent fan operation

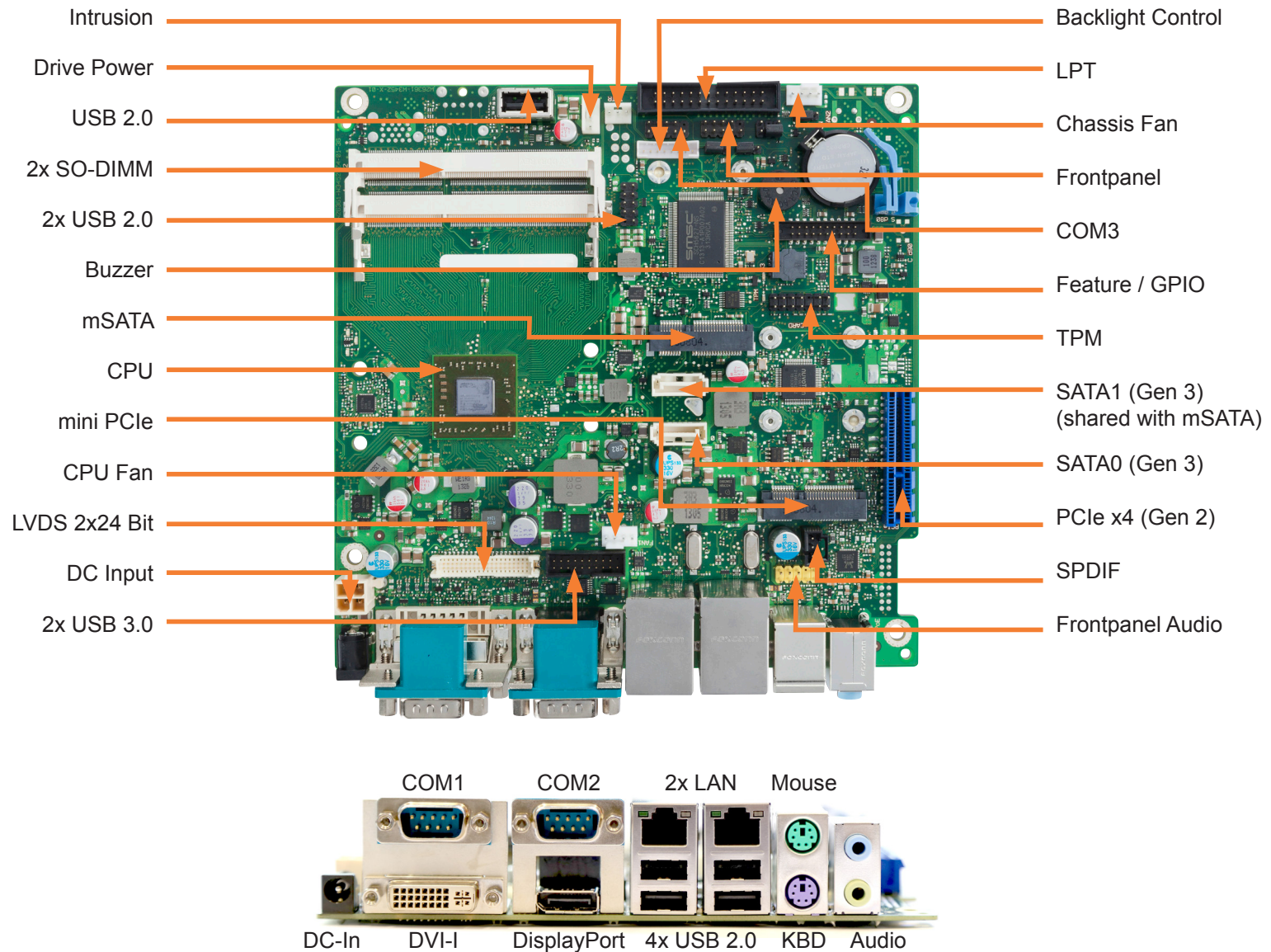
Dual range DC power supply 12V / 19-24V

Long life components for 24/7 use



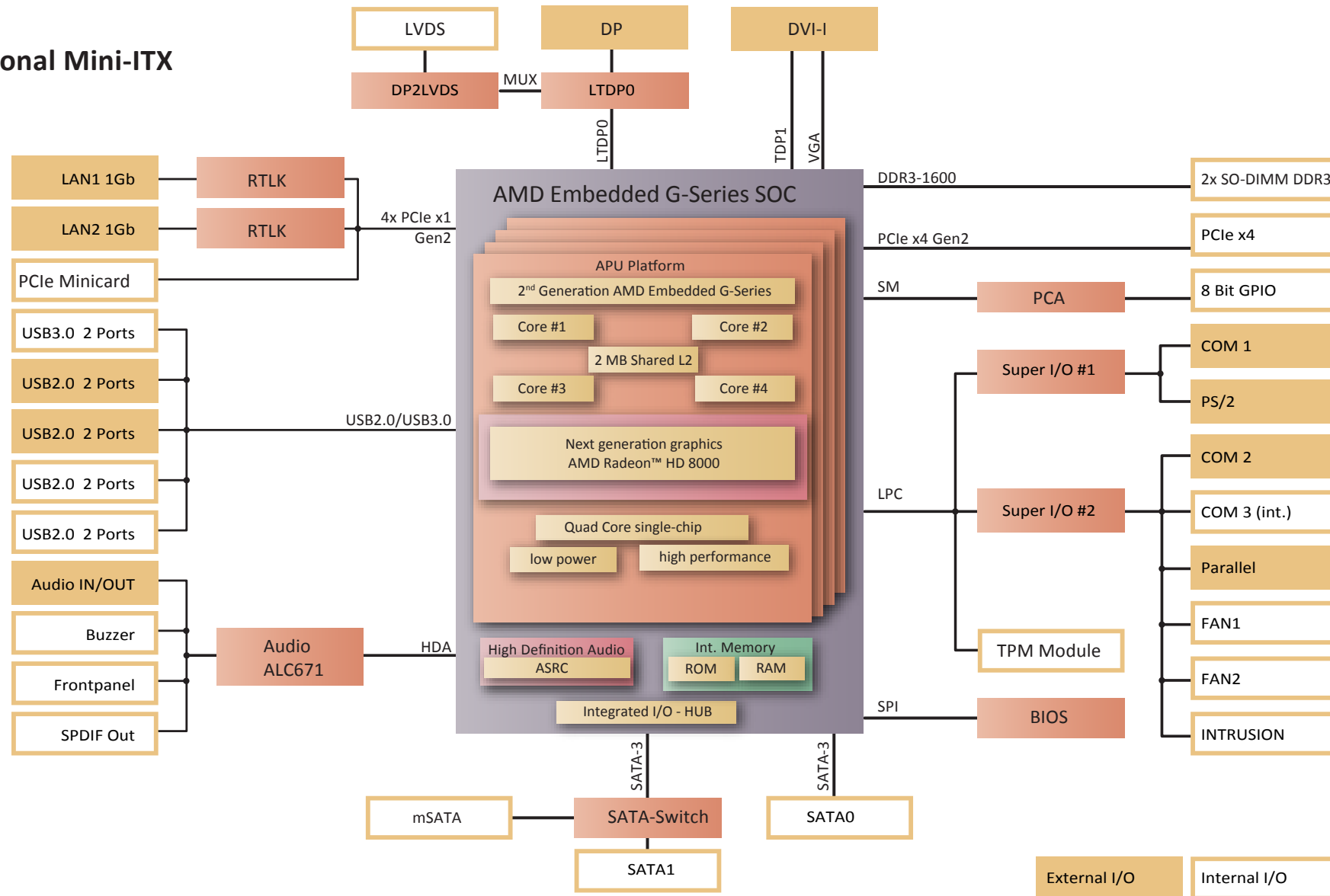
Formfactor	Professional Mini-ITX, 170 x 170 mm
CPU	AMD Embedded GX-420CA 2.0 GHz Quad-core (L2 cache 2MB shared, 25W) with AMD Radeon™ HD 8400E Graphics 600 MHz, DDR3/1600 AMD Embedded GX-217GA 1.65 GHz Dual-core (L2 cache 1MB shared, 15W) with AMD Radeon™ HD 8280E Graphics 450 MHz, DDR3/1600 AMD Embedded GX-210HA 1.0 GHz Dual-core (L2 cache 1MB shared, 9W) with AMD Radeon™ HD 8210E Graphics 300 MHz, DDR3/1333 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
LAN	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 monitors & 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")

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conga-IGX - Block diagram

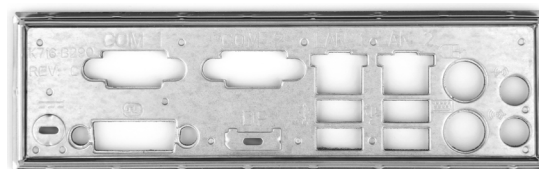
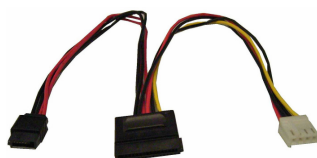
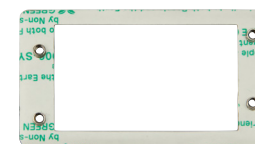
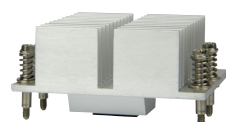
Professional Mini-ITX



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 / Engineering Tools for Mini-ITX conga-IGX		
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



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