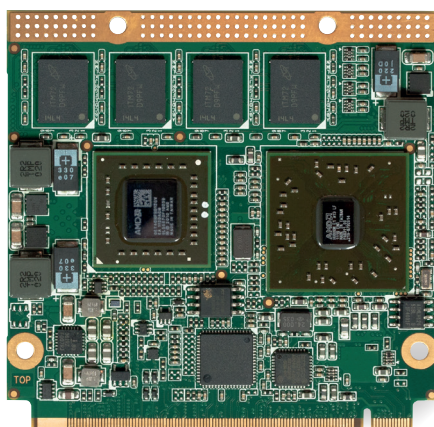


# HIGH GRAPHICS PERFORMANCE WITH LOW POWER CONSUMPTION

## conga-QAF

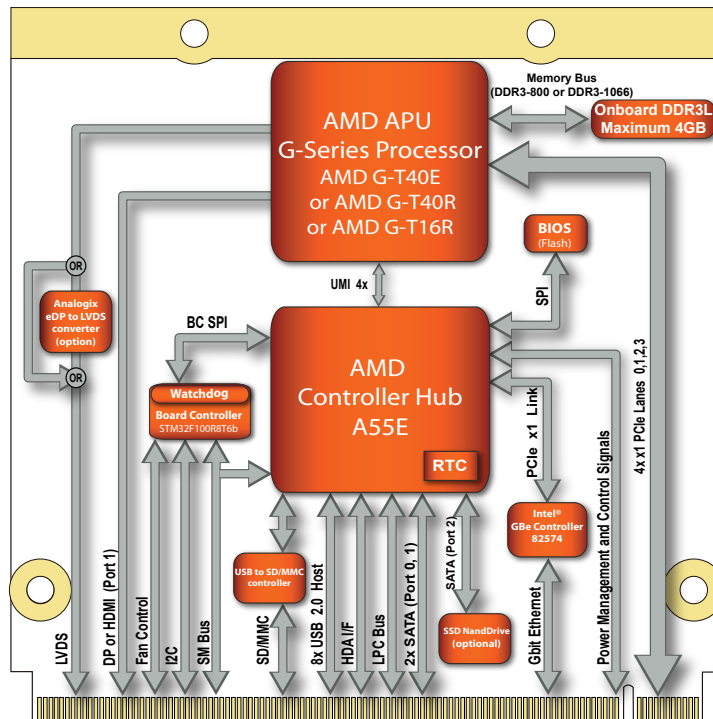


- Based on AMD Embedded G-Series Processors
- Best price/performance ratio
- High performance graphics



|                           |                                                                                                                                                                                                       |                     |                   |          |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------------|----------|
| Formfactor                | Qseven Form Factor, 70 x 70 mm                                                                                                                                                                        |                     |                   |          |
| CPU                       | AMD Embedded G-Series Processors                                                                                                                                                                      |                     |                   |          |
|                           | AMD G-T40E                                                                                                                                                                                            | 1.0 GHz Dual Core   | L2 cache 512KB x2 | 6.4W TDP |
|                           | AMD G-T40R                                                                                                                                                                                            | 1.0 GHz Single Core | L2 cache 512KB    | 5.5W TDP |
|                           | AMD G-T16R                                                                                                                                                                                            | 615 MHz Single Core | L2 cache 512KB    | 4.5W TDP |
| DRAM                      | 2 GByte DDR3L-1066 onboard memory, optional 4 GByte                                                                                                                                                   |                     |                   |          |
| Chipset                   | AMD A55E Controller Hub                                                                                                                                                                               |                     |                   |          |
| Ethernet                  | Gigabit Ethernet and Intel® 82574                                                                                                                                                                     |                     |                   |          |
| I/O Interfaces            | 4x PCI Express x1 lanes, 2x Serial ATA®, 8x USB 2.0, 1x SDIO to 8bit SD/MMC, 2x ExpressCard™, LPC Bus, I2C Bus                                                                                        |                     |                   |          |
| Mass Storage              | Onboard SATA Solid State Drive up to 32 GByte (optional)                                                                                                                                              |                     |                   |          |
| Sound                     | High Definition Audio Interface                                                                                                                                                                       |                     |                   |          |
| Graphics                  | Integrated AMD Radeon™ HD 6250, DirectX®11 graphics with UVD 3.0, Dual Simultaneous Display Support                                                                                                   |                     |                   |          |
| LVDS                      | 18bit, 24bit, Dual 24bit, up to 1920x1200@60Hz;; Automatic Panel Detection via EDID/EPI                                                                                                               |                     |                   |          |
| Digital Display           | DisplayPort 1.1a or HDMI 1.3 port, resolutions up to 1920x1200@60Hz                                                                                                                                   |                     |                   |          |
| 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 4MByte Flash BIOS with congatec Embedded BIOS features                                                                                                                                      |                     |                   |          |
| Power Management          | ACPI 3.0 with battery support                                                                                                                                                                         |                     |                   |          |
| Operating Systems         | Microsoft® Windows7, Microsoft® Windows XP, Microsoft® Windows® embedded Standard, Linux 2.6                                                                                                          |                     |                   |          |
| 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                      | 70 x 70 mm (2.76" x 2.76")                                                                                                                                                                            |                     |                   |          |

# conga-QAF | Block diagram



# conga-QAF | Order Information

| Article                | PN     | Description                                                                                                                                                         |
|------------------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| conga-QAF/T40R-2G      | 015300 | Qseven module with low power AMD G-Series Single Core 1.0GHz Processor T40R with 512kB L2 cache and 2GB DDR3 onboard memory.                                        |
| conga-QAF/T40E-2G      | 015301 | Qseven module with low power AMD G-Series dual core 1.0GHz processor T40E with 512kB L2 cache and 2GB DDR3 onboard memory.                                          |
| conga-QAF/T40E-2G SSD4 | 015303 | Qseven module with low power AMD G-Series dual core 1.0GHz processor T40E with 512kB L2 cache, 2GB DDR3 onboard memory and 4GB onboard MLC SATA Solid State Disk.   |
| conga-QAF/T40R-2G SSD8 | 015304 | Qseven module with low power AMD G-Series single core 1.0GHz processor T40R with 512kB L2 cache, 2GB DDR3 onboard memory and 8GB onboard MLC SATA Solid State Disk. |
| conga-QAF/T40E-4G      | 015306 | Qseven module with low power AMD G-Series dual core 1.0GHz processor T40E with 512kB L2 cache and 4GB DDR3 onboard memory.                                          |
| conga-QAF/T16R-1G      | 015307 | Qseven module with low power AMD G-Series single core 615MHz processor T16R with 512kB L2 cache and 1GB DDR3 onboard memory.                                        |
| QAF/HSP-B              | 015330 | Standard heatspreader for Qseven module conga-QAF. All standoffs are with 2.7mm bore hole.                                                                          |
| QAF/HSP-T              | 015331 | Standard heatspreader for Qseven module conga-QAF. All standoffs are M2.5mm thread.                                                                                 |
| QAF/CSP-B 6mm          | 015332 | Passive cooling solution with 6mm fin height for Qseven module conga-QAF. All standoffs are with 2.7mm bore hole.                                                   |

| Accessories                  |          |                                                                                                                                    |
|------------------------------|----------|------------------------------------------------------------------------------------------------------------------------------------|
| conga-QEVAL                  | 007003   | Evaluation platform for Qseven 2.0 modules                                                                                         |
| conga-QKIT                   | 077455   | Starterkit for Qseven including conga-QEVAL, conga-LDVI/EPI, conga-FPA1, Dual DVI-D ADD2 Card, ATX power supply...                 |
| Qseven Mobility Kit          | 077460   | Complete ready-to-use starter-kit for mobile applications                                                                          |
| conga-MCB/Qseven DP          | 020731   | Qseven mini carrier board for mobile applications with DisplayPort                                                                 |
| conga-MCB/Qseven Cable Kit   | 14000041 | Complete cable kit for Qseven mini carrier board                                                                                   |
| Qseven MXM connector Foxconn | 400017   | Socket for Qseven Carrier Boards. 10pcs package. Foxconn standard type, SMT, lead free, 230 positions, 0.50mm pitch, 7.8mm height. |
| Qseven MXM Connector Aces    | 400018   | Socket for Qseven Carrier Boards. 10pcs package. ACES standard type, SMT, lead free, 230 positions, 0.50mm pitch, 7.8mm height.    |
| conga-LDVI/EPI               | 011115   | LVDS to DVI converter board for digital flat panels with onboard EEPROM                                                            |

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