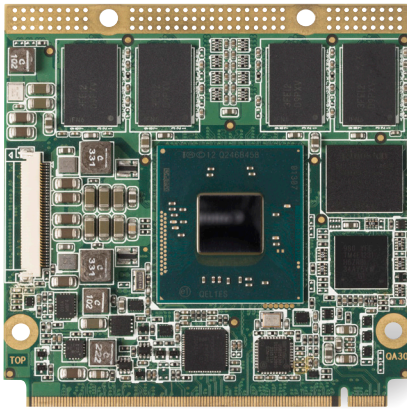


# HIGH PERFORMANCE

# conga-QA3



- 3<sup>rd</sup> Gen. Intel® Atom™ / Celeron® processors
- High resolution Intel® Gen. 7 graphics
- Temperature range up to -40°C .. +85°



|                                 |  |                           |                       |          |
|---------------------------------|--|---------------------------|-----------------------|----------|
| Formfactor                      | Qseven Form Factor Rev. 2.0 compliant   70x70 mm   |                           |                       |          |
| CPU                             | Intel® Atom™ E3845   | 1.91 GHz QuadCore         | L2 cache 2MB          | 10W TDP  |
|                                 | Intel® Atom™ E3827   | 1.75 GHz Dual Core        | L2 cache 1MB          | 8W TDP   |
|                                 | Intel® Atom™ E3826   | 1.46 GHz Dual Core        | L2 cache 1MB          | 7W TDP   |
|                                 | Intel® Atom™ E3825   | 1.33 GHz Dual Core        | L2 cache 1MB          | 6W TDP   |
|                                 | Intel® Atom™ E3815   | 1.46 GHz Single Core      | L2 cache 512kB        | 5W TDP   |
|                                 | Intel® Atom™ E3805   | 1.33 GHz Dual Core        | L2 cache 1MB          | 3W TDP   |
|                                 | Intel® Celeron J1900   | 2.0 GHz Quad Core         | L2 cache 2MB          | 10W TDP  |
|                                 | Intel® Celeron N2930   | 1.83 GHz Quad Core        | L2 cache 2MB          | 7.5W TDP |
|                                 | Intel® Celeron N2807   | 1.58 GHz Dual Core        | L2 cache 1MB          | 4.5W TDP |
| DRAM                            | Dual Channel   up to 8GB onboard DDR3L with 1333 MT/s  |                           |                       |          |
| Chipset                         | Integrated in SoC  |                           |                       |          |
| Ethernet                        | Intel® I210 Gigabit Ethernet controller  |                           |                       |          |
| I/O Interfaces                  | 6x USB 2.0 or 1x USB 3.0 and 5x USB 2.0   2x SATA   1x SDIO   3x PCIe   I <sup>2</sup> C Bus   LPC bus   1x SPI  |                           |                       |          |
| Mass Storage                    | eMMC 5.0 onboard flash up to 64 GByte (optional only for Intel® Atom™)   |                           |                       |          |
| Sound                           | Intel® High Definition Audio (Intel® HD Audio)   |                           |                       |          |
| Graphics                        | Intel® HD Graphics with support for DirectX11   OpenGL 3.0   OpenCL 1.2   OpenGLES 2.0   full HW acceleration for decode/encode of MPEG2, H.264   MVC and dual simultaneous display support  |                           |                       |          |
| LVDS                            | Dual channel LVDS transmitter   support for flat panels with 2x24 bit data mapping up to a resolution of 1920x1200@60Hz  |                           |                       |          |
| Digital Display Interface (DDI) | DisplayPort++ up to 2560x1600  |                           |                       |          |
| Features                        | MIPI-CSI   |                           |                       |          |
| congatec Board controller       | Multi Stage Watchdog   non-volatile User Data Storage   Manufacturing and Board Information   Board Statistics<br>I <sup>2</sup> C bus (fast mode   400 kHz   multi-master)   Power Loss Control   |                           |                       |          |
| Embedded BIOS Features          | AMI Aptio® UEFI 2.x firmware; 8 MByte serial SPI with congatec Embedded BIOS features (OEM Logo   OEM CMOS Defaults   LD Control<br>Display Auto Detection   Backlight Control   Flash Update)   |                           |                       |          |
| Power Management                | ACPI 5.0 compliant   Smart Battery Management  |                           |                       |          |
| Operating Systems               | Microsoft® Windows 10   Microsoft® Windows 10 IoT Enterprise   Microsoft® Windows 10 IoT Core   Microsoft® Windows 8  <br>Microsoft® Windows 8 embedded   Microsoft® Windows 7   Microsoft® Windows 7 embedded compact   Linux<br>Android   Yocto   MoonIsland / WindRiver IDP |                           |                       |          |
| Power Consumption               | Typ. application 4.5W...12W  |                           |                       |          |
| Temperature                     | Commercial :   | Operating: 0 to +60°C     | Storage: -20 to +80°C |          |
|                                 | Industrial :   | Operating: -40 to +85°C   | Storage: -45 to +85°C |          |
| Humidity                        | Operating:   | 10 to 90% r. H. non cond. |                       |          |
|                                 | Storage:   | 5 to 95% r. H. non cond.  |                       |          |
| Size                            | 70 x 70 mm (2¾" x 2¾")   |                           |                       |          |

# conga-QA3 | Block diagram

