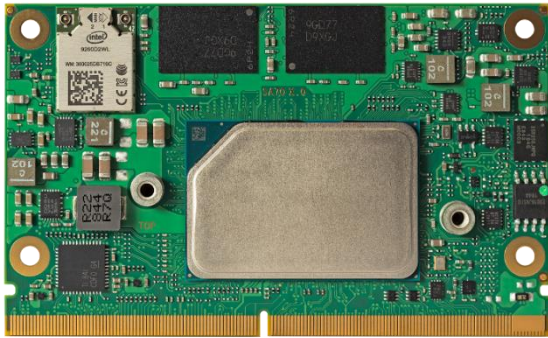


EMBEDDED SMARC 2.1

conga-SA7



- SMARC 2.1 module based on Intel Atom® x6000E Series and Intel® Pentium® and Celeron® J and N Series processors
- High performance Intel® UHD Graphics (Gen11)
- Options for Industrial Temperature Range -40°C to 85°C
- Options for Time Sensitive Networking and Time Coordinated Computing for improved Realtime Capability
- Up to 4.267 MT/s Memory Support

| | | | | | | |
|----------------------------------|---|-------------------------------------|---------------|-----------------------------------|------------|---------------------|
| Form Factor | SMARC Specification 2.1 82x50 mm | | | | | |
| CPU | Processor | TDP | Cores/Threads | Base Frequency/max. Turbo | Gfx Gen.11 | Intel Use Condition |
| | J6413 | 10W | 4 / 4 | 1.8 GHz / 3.0 GHz | 16 EU | PC Client |
| | J6426 | 10W | 4 / 4 | 2.0 GHz / 3.0 GHz | 32 EU | PC Client |
| | x6211E | 6W | 2 / 2 | 1.3 GHz / 3.0 GHz | 16 EU | Embedded |
| | x6413E | 9W | 4 / 4 | 1.5 GHz / 3.0 GHz | 16 EU | Embedded |
| | x6425E | 12W | 4 / 4 | 2.0 GHz / 3.0 GHz | 32 EU | Embedded |
| | x6212RE | 6W | 2 / 2 | 1.2 GHz / --- | 16 EU | Industrial |
| | x6414RE | 9W | 4 / 4 | 1.5 GHz / --- | 16 EU | Industrial |
| | x6425RE | 12W | 4 / 4 | 1.9 GHz / --- | 32 EU | Industrial |
| DRAM | max. 16GB onboard LPDDR4x up to 4.267 MT/s | | | | | |
| Ethernet | 2x Intel® GbE with TSN support and Out-Of-Band Management 2x real-time trigger | | | | | |
| I/O Interfaces | 2x USB 3.1 Gen2 (1x OTG) 6x USB 2.0 (1x OTG) 1x SATA III 1x SDIO up to 4x PCIe Gen3 2x I ² C Bus 1x SPI 1x eSPI 4x UART GPIO 2x CAN onboard M.2 1216 WiFi/BT module (optional) | | | | | |
| Mass Storage | eMMC 5.1 onboard flash up to 64GB (optional up to 128GB) | | | | | |
| Audio | Intel® HD Audio | | | | | |
| Graphics | Intel® UHD Graphics (Gen11) | | | | | |
| LVDS | Dual channel LVDS transmitter support for flat panels with 2x24 bit data mapping up to a resolution of 1920x1200 @60Hz shared with eDP or 1x MIPI-DSI x4 (option) | | | | | |
| Digital Display Interface | 2x DDI up to 4096x2160p | | | | | |
| congatec Board controller | Multistage watchdog non-volatile user data storage manufacturing and board Information board statistics fast mode and multi-master I ² C bus power loss control | | | | | |
| Embedded BIOS Feature | AMI Aptio® UEFI firmware 32 Mbyte serial SPI with congatec Embedded BIOS feature OEM Logo OEM CMOS Defaults LCD Control 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 Linux Android Yocto RTS Hypervisor | | | | | |
| Power Consumption | tbd. see manual for full details | | | | | |
| Temperature Range | Commercial: | Operating Temperature: 0 to +60°C | | Storage Temperature: -20 to +80°C | | |
| | Industrial: | Operating Temperature: -40 to +85°C | | Storage Temperature: -40 to +85°C | | |
| Humidity | Operating: | 10 to 90% r. H. non cond. | | | | |
| | Storage: | 5 to 95% r. H. non cond. | | | | |
| Size | 82 x 50 mm (approx. 3,23" x 1,97") | | | | | |

conga-SA7 | Block Diagram

