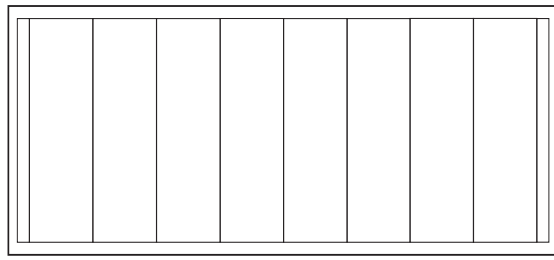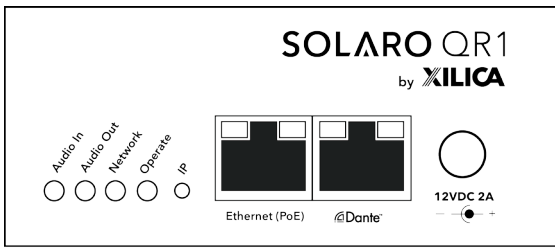# SOLARO QR1

Open-Architecture DSP

XILICA

A member of Xilica's new Solaro family of processors, the QR1 is all about modular I/O flexibility and powerful dual core processing built into a compact chassis.

- Quarter Rack 1RU chassis. Dual core processor built on a new Linux platform. Surface mount bracket included. PoE enabled

- Modular mainframe/chassis with eight (8) rear card slots. Any card type, in any card slot, in any order maximizes I/O flexibility

- Available plug-in cards: 2ch analog and AES/EBU audio I/O cards (maximum of 16 audio channels - 8 card slots) and a 4ch GPIO card that is selectable as inputs or outputs (maximum of 32 GPIO channels - 8 card slots)

- Built-in 4x4 I/O of Dante network audio

- Built-in event scheduler functionality

- A soft-key activated QR1-AEC-SK option provides 8ch of AEC inputs @250ms delay / 16ch@100ms

- QR1's drag & drop Xilica Designer software for PC and Mac is used to configure DSP functionality, the modular I/O card configuration and the QR1's programmable remote controls

- Solaro QR1 can be controlled via Ethernet using the Xilica Designer software GUI; with GPIO card ports; the optional new XTouch50 and XTouch80 programmable touch controls; iOS and Android devices via our free XTouchApp; and with any third-party control system (Crestron, AMX, others)

- Xilica's renowned DSP audio performance

Engineer's Specification

The Solaro QR1 DSP shall provide eight (8) modular card slots in a quarter rack 1RU chassis that accepts 2ch audio and 4ch GPIO plug-in cards. Available plug-in cards include 2ch analog audio input and output cards; a 2ch AES/EBU digital audio card selectable as inputs or outputs; and a 4ch GPIO card selectable as inputs or outputs. The 2ch analog Mic/Line input card provides Mic/Line and 48v phantom power selection per input and uses premium grade mic pre-amps. A built-in 4x4 Dante network audio card provides added I/O connectivity. The front panel shall include power, audio in/out LEDs, network LEDS, Operate LED, IP reset, RJ45 Ethernet connectivity, and RJ45 Dante™ connectivity. Power can be sourced from the included +12VDC/2A external power supply or via PoE. Power consumption is 12 watts (40.9 BTU/Hour) maximum. Audio connections shall be accessed via rear panel 6 position 3.81mm Phoenix plug-in type connectors. A soft-key activated QR1-AEC-SK option provides AEC inputs - 8ch at 250ms delay / 16ch at 100ms. The QR1 also provides built-in scheduler functionality. The QR1 is configured and programmed using the Xilica Designer software. Processing is via a 40-bit floating point DSP architecture and high performance 32-bit A/D & D/A converters at a sample rate of 48kHz. Available DSP components shall include (but not be limited to) various forms of: mixers, equalizers, filters, crossovers, dynamics/gain controls, routers, room combiners, delays, remote controls, meters, and onboard GPIO. All program memory shall be non-volatile and provide program security should power fail. The processors shall be ETL marked and comply with UL/CSA/CE safety requirements, FCC emission requirements, and shall be compliant with the RoHS directive. Warranty shall be 3 years parts and labor. The DSP shall be the Solaro QR1.

Technical Specifications

Card slots	8 (8 blank cards mounted in the frame)		Mounting	Surface mount bracket included Optional dual rack mount kit
Processor	40-bit Floating point		Dimensions	4.25"x1.75"x6" (108x44x152mm) (without mounting brackets)
Sampling rate	48kHz		Weight	2.2lbs / 1kg (Mainframe only, without power supply)
Propagation delay	4.5ms		Warranty	3 years parts and labor
Connectors	RJ45 with PoE capability, RJ45 with Dante connectivity, DC Jack (when PoE is not used)			
Power	+12VDC/2A External power supply 90-240 VAC 50-60Hz (included) or Power over Ethernet (PoE)			

*Specifications subject to change

Customer Support

If you'd like to contact us regarding product support or technical designs, email support@xilica.com and we'll connect you with a solutions engineer. Alternatively, if you'd like to speak to someone, you can call the following numbers for immediate assistance:

International:	+1 905 770-0055
US Toll Free:	+1 877 767-0234
Europe:	+31 29940-1100
China & Hong Kong SAR:	+852 2604-9382