



# Itron<sup>®</sup> Riva Dev Edge Board

Provides adaptive communications capability for prototyping on the OpenWay Riva Platform

The Itron Riva Dev Edge enables exploration and prototyping to help Smart Cities and Smart Utilities increase efficiency, conservation, and public safety, with devices such as Earthquake Sensors, Gas Gates, and Methane Sensors.

The Dev Edge board includes processor, memory, and control logic. The Dev Edge is stacked with the Dev Edge RF board in our Itron Riva Dev Edge Kit for use as a root or a node with radio

frequency communications capability. The Dev Edge PLC board can be added to the stack, enabling wired powerline carrier communications. The entire stack enables Itron Riva adaptive communications technology which allows devices to interact with each other while dynamically switching between RF and PLC to ensure the fastest and most reliable communications path. The boards stack in a compact, integrated form factor.

## SPECIFICATIONS

<b>Form Factor</b>	<b>Edge</b>
Dimensions (HxWxD)	1x2.125x3.5
<b>Power Line Carrier (PLC)</b>	
	available when Edge PLC board is added
<b>RF Protocol</b>	
	IEEE 802.15.4g
<b>RF Operational Bands</b>	
	900 Mhz
<b>RF Output Power</b>	
	1 Watt
<b>RF Modulations</b>	
	FSK, OFDM (up to 600kbps)
<b>Additional Specs</b>	
Input voltage	5v 2a
Memory	<ul style="list-style-type: none"><li>» TI AM3356 ARM Cortex A8 32-bit Microprocessor at 450 Mhz</li><li>» 256 MB of Flash Memory</li><li>» 128 MB of RAM Memory additional 4 GB eMMC Flash Memory</li></ul>

All boards in the Dev Edge series have 40-Pin I/O Expansion Connectors.

### J8-40-Pin Serial Connector

Pin Number	Description	Pin Number	Description
P8-1	GND	P8-21	GPIO3_8
P8-2	5VDC	P8-22	PON_WAKEUP
P8-3	5VDC	P8-23	EPF_AUX
P8-4	GND	P8-24	SPI0_CS0
P8-5	Do Not Use	P8-25	Reserved
P8-6	Do Not Use	P8-26	SPI0_D0
P8-7	HV_CMP_AUX	P8-27	SPI0_D1
P8-8	GPIO3_18	P8-28	SPI0_SCLK
P8-9	WARMRSTN	P8-29	GPIO2_22
P8-10	Reserved	P8-30	GPIO3_21
P8-11	Reserved	P8-31	GPIO2_23
P8-12	Reserved	P8-32	GPIO3_19
P8-13	SP1_CS0	P8-33	Reserved
P8-14	SPI1_D0	P8-34	Reserved
P8-15	SPI1_D1	P8-35	Reserved
P8-16	SPI1_SCLK	P8-36	Reserved
P8-17	I2C2_SDA	P8-37	AIN_0
P8-18	I2C2_SCL	P8-38	AIN_1
P8-19	GPIO3_0	P8-39	5VDC
P8-20	GPIO3_4	P8-40	GND



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