

# **EXTREME USB USB USB**

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## USB 3-2-1 Raven<sup>™</sup> 3100 Core

**Embedded USB 3.1 Extender Module** 

The USB 3-2-1 Raven 3100 Core extender module offers OEM developers the world's most reliable and advanced USB 3.1 Gen 1 extension technology in an integratable module form factor.

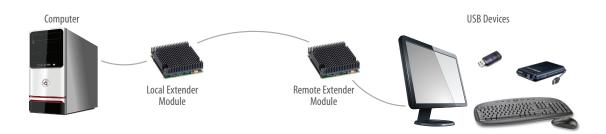


#### **Summary of Features**

- USB 3.1 Gen 1 data rate up to 5Gbps
- Supports all USB 3.1, 2.0, 1.1 devices simultaneously at full bandwidth
- 100/1000 MII/GMII side channel
- Bidirectional RS232 up to 115200 baud
- Single cable, CAT 6a/7 (100m) or fiber (200m)
- Point-to-point connection over dedicated cable
- I<sup>2</sup>C master or slave host interface

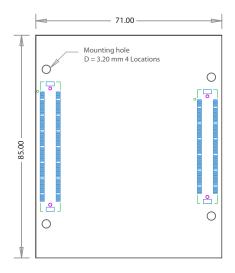
#### **Applications**

- Medical Devices
- Industrial Devices
- KVM Extension
- Conferencing Cameras



## USB 3-2-1 Raven 3100 Core Specifications

#### **PCBA Dimensions**





FORM FACTOR		
Dimensions/Weight:	71.0mm x 85.0mm x 24.3mm (2.80" x 3.35" x 0.96"); 150g (0.33 lbs.)	
Connection:	Dual Connector	
	Hirose FX10A-120P/12-SV1(91) and Hirose FX10A-140P/12-SV1(91)	
Mounting Holes:	4x 3.20mm (+/-0.10mm)	
POWER		
Requirements:	5V up to 5W	
USB SUPPORT		
USB Speeds:	SuperSpeed 5 Gbps, High-Speed, Full-Speed, Low-Speed	
Device Compatibility:	All Device Types and Classes (Control, Interrupt, Isochronous and Bulk)	
Host Compatibility:	tibility: OHCI, UHCI, EHCI, xHCI	
CONNECTIVITY		
Link Interface:	RXAUI or SFI	
Ethernet Channel:	IEEE 802.3-2000 MII/GMII	
USB:	USB 3.1 Gen 1, backwards compatible to USB 2.0 and 1.1	
RS232:	Up to 115200 Baud	
ENVIRONMENTAL		
Temperature:	0°C – 50°C (32°F – 122°F) Operating, -20°C – 70°C (-4°F – 158°F) Storage	
Humidity:	20-80% Operating, 10-90% Storage Relative Humidity Non-Condensing	
SUPPORT		
Warranty:	2 years	

### **Ordering Information**

The USB 3-2-1 Raven 3100 Core Dev Kit comes with two matching Link Interface Modules, two power cords and includes a 2-year warranty. Additional accessories or replacement items are available for purchase. For more information, email <a href="mailto:lcronSales@MaximIntegrated.com">lcronSales@MaximIntegrated.com</a> or call +1 604 638 3920.

PART #	NAME	DESCRIPTION	
Core Module			
02-00143	USB 3-2-1 Raven 3100 Core Extender Module	USB 3-2-1 Raven Extender Core daughterboard for SFI and RXAUI modes over Fiber Optics or CAT 6a/7	
Developer Kit			
00-00445	USB 3-2-1 Raven 3100 Core Developer's Kit	Base Developer Kit for USB 3-2-1 Raven 3100 Core Modules Includes: 1 Raven 3100 Core Series local extender evaluation motherboard, 1 Raven 3100 core series remote extender evaluation motherboard, 2 Raven 3100 core extender modules, 2 international power supplies, 1 USB 3 A to B cable, 2 USB Micro USB programming cables, 1 USB Stick with documentation and instructions. Requires: 2 matching link interface cards and power cords.	
Select 2 Matching Link Interface Modules			
02-00160	Link Interface Module: SFI-MMF	Modular Development for Evaluating SFI Interface with Multimode Fiber Transceiver	
02-00161	Link Interface Module: RXAUI CATX AQR	Modular Development for Evaluating the supported RXAUI Interface with Aquantia Chipset	
Select 2 Power Cords			
21-00115	NA Power Cord	IEC320-C7/C8 2-pin Power Cord for North America	
21-00116	EU Power Cord	IEC320-C7/C8 2-pin Power Cord for Europe	
21-00117	UK Power Cord	IEC320-C7/C8 2-pin Power Cord for United Kingdom	
21-00118	AU Power Cord	IEC320-C7/C8 2-pin Power Cord for Australia	
21-00109	JP Power Cord	IEC320-C7/C8 2-pin Power Cord for Japan	