

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China











# CONNECTCORE® 6UL STARTER KIT

Compact and easy-to-use development and rapid prototyping platform for smart connected devices and applications

The ConnectCore 6UL Starter Kit provides a universal and powerful platform for your smart connected devices. It delivers an extremely compact and flexible development and rapid prototyping kit for the ConnectCore 6UL System-on-Module (SOM), which is suited for use in a wide range of connected applications.

### BUILD. CONNECT. EVERYTHING.

The ConnectCore 6UL SBC Express is a SOM built on the low-power NXP i.MX6UL application processor, 256 MB flash, 256 MB RAM, integrated 10/100 Mbit Ethernet, pre-certified dual-band 802.11ac wireless LAN + Bluetooth 4.2 connectivity with an integrated higherficiency antenna and a focused set of key peripheral interfaces.

The simplified but also rugged board design offers USB host/device connections, microSD storage and embedded expansion connectors for development and prototyping purposes. These include Grove connectors, which allow you to instantly connect and integrate a wide range of compatible off-the-shelf sensors and peripherals, effortlessly.

Digi's Yocto Project Linux BSP and software support is provided with full source code access straight out of the box. Whether you are building a connected device for medical, healthcare, energy or industrial applications, or prototyping new connected product concepts, the ConnectCore 6UL Starter Kit is the ideal platform to get you started. And if you need additional help with your project, Digi also offers professional support and design services to help you go to market smarter and faster.

#### THE KIT INCLUDES:

- ✓ 1 ConnectCore 6UL SBC Express w/Ethernet and 802.11a/b/g/n/ac + Bluetooth 4.2
- ✓ 1 Micro-USB Y-Cable

NUMBER	DESCRIPTION
CC-WMX6UL-START	ConnectCore 6UL Starter Kit

#### **FEATURES AND BENEFITS**

- Very compact 87 x 63 mm form factor
- NXP i.MX6UL with 256 MB NAND flash and 256 MB DDR3
- Pre-certified dual-band 802.11ac Wi-Fi connectivity
- Bluetooth 4.2, with Bluetooth Low Energy support
- Integrated on-board high-efficiency antenna
- 10/100 Mbit Ethernet networking
- Grove and expansion connectors for flexibility
- Rugged design with mounting options
- Power option via USB connector
- Industrial operating temperature range
- Complete Yocto Project Linux BSP with source code



SPECIFICATIONS	ConnectCore® 6UL SBC Express	
PERFORMANCE*		
APPLICATION PROCESSOR	NXP i.MX6UL-2, ARM® Cortex®-A7 @ 528 MHz, 128 KB L2 cache, with NEON™ MPE (Media Processor Engine) co-processor	
MEMORY	256 MB high-reliability NAND flash (SLC), 256 MB DDR3	
WIRED NETWORK CONNECTIVITY		
ETHERNET	1 x 10/100 Mbit Ethernet	
WIRELESS NETWORK CONNECTIVITY		
WI-FI	Dual-band 802.11a/b/g/n/ac 1x1 (MCS 0-9)	
BLUETOOTH	Bluetooth 4.2, with Bluetooth Low Energy support	
ANTENNA	On-board Isolated Magnetic Dipole™ (IMD) stamped metal antenna (2.4/5 GHz)	
PERIHPERALS/INTERFACES		
ETHERNET	RJ-45	
USB HOST	Dual Type-A	
USB DEVICE	Micro-USB	
CONSOLE	Micro-USB	
EXTERNAL STORAGE	microSD	
GROVE***	1 x Grove D, 1 x Grove A, 1 x Grove I2C	
EXPANSION	JTAG, SWD, PWM, GPIO SPI, I <sup>2</sup> C, UART	
COIN CELL	2-pin header	
DISPLAY	8-bit LCD Parallel (optional, via expansion connector)	
LED	Power, Console RX/TX, User	
BUTTONS	Power, Reset, User	
BOOT SELECT SWITCH	NAND/microSD	
DEBUG	Tag-Connect for JTAG and SWD	
CERTIFICATIONS*		
RADIO APPROVALS	US, Canada, EU, Japan, Australia, New Zealand	
EMISSIONS / IMMUNITY / SAFETY	FCC Part 15 Class B, EN 55022 Class B, EN 61000-3-2, EN 61000-3-3, ICES-003 Class B, VCCI Class II, AS 3548, FCC Part 15 Subpart C Section 15.247, IC (Industry Canada), RSS-210 Issue 5 Section 6.2.2(o), EN 300 328, EN 301 489-17, EN 55024, EN 301 489-3, Safety UL/UR (or equivalent)	
POWER REQUIREMENTS		
SUPPLY VOLTAGE	5 VDC @ 200 mA (typical), Also see ConnectCore 6UL product brief for module-only power consumption guidance	
POWER CONNECTORS	Micro-USB, or dedicated power connector (header)	
ENVIRONMENTAL		
OPERATING TEMPERATURE	-40° C to 85° C	
STORAGE TEMPERATURE	-50° C to +125° C	
RELATIVE HUMIDITY	Relative humidity 5% to 90% (non-condensing)	
ALTITUDE	Altitude 12,000 feet (3,658 meters)	
DESIGN VERIFICATION	Temperature: IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-78; Vibration/Shock: IEC 60068-2-6, IEC 60068-2-64, IEC 60068-2-7, HALT	
MECHANICAL		
DIMENSIONS	87 x 63 mm	
WEIGHT	0.9 lbs / 408 g	

 $<sup>^{\</sup>star} Populates ConnectCore \, 6UL \, module \, P/N \, CC-WMX-JN58-NE \, (castellated \, edge \, mounting), \, \\ ^{\star\star} Final \, certifications \, pending. \, \\ ^{\star\star\star} MCA \, link \, option \, through \, zero-ohm \, resistor \, placement. \, \\ ^{\star\star} Populates \, ConnectCore \, 6UL \, module \, P/N \, CC-WMX-JN58-NE \, (castellated \, edge \, mounting), \, \\ ^{\star\star} Final \, certifications \, pending. \, \\ ^{\star\star\star} DCA \, link \, option \, through \, zero-ohm \, resistor \, placement. \, \\ ^{\star\star} DCA \, link \, option \, through \, zero-ohm \, resistor \, placement. \, \\ ^{\star\star} DCA \, link \, option \, through \, zero-ohm \, resistor \, placement. \, \\ ^{\star\star} DCA \, link \, option \, through \, zero-ohm \, resistor \, placement. \, \\ ^{\star\star} DCA \, link \, option \, through \, zero-ohm \, resistor \, placement. \, \\ ^{\star\star} DCA \, link \, option \, through \, zero-ohm \, resistor \, placement. \, \\ ^{\star\star} DCA \, link \, option \, through \, zero-ohm \, resistor \, placement. \, \\ ^{\star\star} DCA \, link \, option \, through \, zero-ohm \, resistor \, placement. \, \\ ^{\star\star} DCA \, link \, option \, through \, zero-ohm \, resistor \, placement. \, \\ ^{\star\star} DCA \, link \, option \, through \, zero-ohm \, resistor \, placement. \, \\ ^{\star\star} DCA \, link \, option \, through \, zero-ohm \, resistor \, placement. \, \\ ^{\star\star} DCA \, link \, option \, placement. \, \\ ^{\star\star} DCA \, link \, option \, placement. \, \\ ^{\star\star} DCA \, link \, option \, placement. \, \\ ^{\star\star} DCA \, link \, option \, placement. \, \\ ^{\star\star} DCA \, link \, option \, placement. \, \\ ^{\star\star} DCA \, link \, option \, placement. \, \\ ^{\star\star} DCA \, link \, option \, placement. \, \\ ^{\star\star} DCA \, link \, option \, placement. \, \\ ^{\star\star} DCA \, link \, option \, placement. \, \\ ^{\star\star} DCA \, link \, option \, placement. \, \\ ^{\star\star} DCA \, link \, option \, placement. \, \\ ^{\star\star} DCA \, link \, option \, placement. \, \\ ^{\star\star} DCA \, link \, option \, placement. \, \\ ^{\star\star} DCA \, link \, option \, placement. \, \\ ^{\star\star} DCA \, link \, option \, placement. \, \\ ^{\star\star} DCA \, link \, option \, placement. \, \\ ^{\star\star} DCA \, link \, option \, placement. \, \\ ^{\star\star} DCA \, link \, option \, placement. \, \\ ^{\star\star} DCA \, link \, option \, placement. \, \\ ^{\star\star} DCA \, link \, option$ 













Go to market smarter. Go to market faster. Learn more at www.digi.com/ccul

