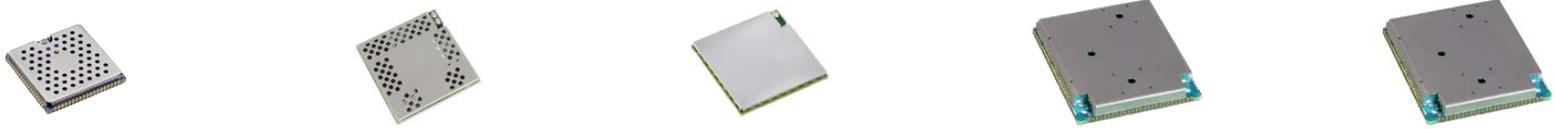


# DIGI CONNECTCORE® PRODUCT COMPARISON



	ConnectCore 6UL	ConnectCore 6	ConnectCore 6+	ConnectCore 8M Nano	ConnectCore 8X
Form Factor L x W x H	SMT 29 mm x 29 mm x 3.5 mm 76-pad castellated vias, or LGA-245	SMT 50 X 50 X 5 mm LGA-400	SMT 50 mm x 50 mm x 5 mm LGA-400	SMT 40 mm x 45 mm x 3.5 mm LGA-474	SMT 40 mm x 45 mm x 3.5 mm LGA-474
CPU	NXP i.MX6UL 1x Cortex-A7 @528 MHz	NXP i.MX 6 2-4x Cortex-A9 @ 1.2 GHz	NXP i.MX6 Plus 2-4x Cortex-A9 @ 1.2 GHz	NXP i.MX 8M Nano 1-4x Cortex-A35 cores @ 1.4 GHz 1x Cortex-M7 core @ 600 MHz	NXP i.MX 8X 2-4x Cortex-A35 cores @ 1.0 GHz 1x Cortex-M4F core @ 264MHz
Network Connectivity	802.11 a/b/g/n/ac (1x1) Bluetooth® 5 Dual 10/100 Ethernet	802.11 a/b/g/n (1x1) Bluetooth 4.0 Gigabit Ethernet	802.11 a/b/g/n/ac (1x1) Bluetooth 5 Gigabit Ethernet	802.11 a/b/g/n/ac (1x1) Bluetooth 5 10/100/1000 Gigabit Ethernet	802.11 a/b/g/n/ac (2x2) Bluetooth 5 Dual 10/100/1000 Gigabit Ethernet
Memory	Up to 1 GB NAND flash, Up to 1 GB DDR3	Up to 8 GB eMMC flash, Up to 2 GB DDR3	Up to 8 GB eMMC flash, Up to 2 GB DDR3	Up to 8 GB eMMC flash, Up to 1 GB LPDDR4	Up to 16 GB eMMC flash, Up to 2 GB LPDDR4
Graphics	2D Pixel Processing Pipeline (PXP), 8/10/16/24-bit parallel LCD display	Up to two displays, 1080p, LVDS, parallel, HDMI, 2D/3D GPU acceleration	LVDS, MIPI display port, MIPI camera port and HDMI v1.4, 3D video playback in high definition	One display, LCDIF display controller, 1080p display through MIPI DSI, GPU available - GC7000UL (2-Shader), OpenGL/CL	Up to two displays, 1080p, MIPI-DSI/LVDS, 2D/3D acceleration, GPU-GC7000Lite (2-/4-Shader), OpenGL/CL VPU available - encode/decode 1080p
OS Support	Yocto Project Linux	Yocto Project Linux Android Windows Embedded Compact*	Yocto Project Linux Android	Yocto Project Linux	Yocto Project Linux Android
Wireless Certifications	US, Canada, EU, Japan, Australia, New Zealand	US, Canada, EU, Japan, Australia, New Zealand	US, Canada, EU, Australia, New Zealand	US, Canada, EU, Japan, Australia, New Zealand	US, Canada, EU, Japan, Australia, New Zealand
Environmental	Temperature: IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-78  Vibration/Shock: IEC 60068-2-6, IEC 60068-2-64, IEC 60068-2-27, HALT	Temperature: IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-78  Vibration/Shock: IEC 60068-2-6, IEC 60068-2-64, IEC 60068-2-27, HALT	Temperature: IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-78  Vibration/Shock: IEC 60068-2-6, IEC 60068-2-64, IEC 60068-2-27, HALT	Temperature: EC 60068-2-1, IEC 60068-2-2, IEC 60068-2-78  Vibration/Shock: IEC 60068-2-6, IEC 60068-2-64, IEC 60068-2-27, HALT	Temperature: IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-78  Vibration/Shock: IEC 60068-2-6, IEC 60068-2-64, IEC 60068-2-27, HALT
Operating Temp	-40° C to +85° C	-40° C to +85° C	-40° C to +85° C	-40° C to +85° C	-40° C to +85° C
Development Kits	CC-WMX6UL-KIT Optional LCD kits - CC-ACC-LCDW-10, CC-ACC-LCD-70WV	CC-WMX6-KIT Optional LCD kit - CC-ACC-LCDW-10	CC-WMX6P-KIT Optional LCD kit - CC-ACC-LCDW-10	CC-WMX8MN-KIT Optional LCD kit - CC-ACC-LCDW-10	CC-WMX8-KIT Optional LCD kit - CC-ACC-LCDW-10

\*Third party partner

# DIGI CONNECTCORE®/WDS POSITIONING GUIDE



Digi offers a selection of ultra-compact and highly integrated embedded System of Modules (SoM) and Single-Board Computers (SBC) for building intelligent and secure connected devices that require long-term availability. Develop and deploy diagnostics, logging, monitoring and control applications within a variety of demanding industries, including medical device, transportation, industrial, energy and smart cities.

## HOW TO DECIDE WHEN TO BUY VS. BUILD

Using a System-on-Module (SOM) or Single Board Computer (SBC) is a common way to connect a product to the Internet of Things (IOT). The major benefit is the reuse of Digi's development and wireless connectivity expertise reducing design complexity and accelerating time-to-market.

### Questions to Consider:

- What are the development cost and risk (NRE)?
- What certifications and approvals are required (testing and validation)?
- How much does it cost to maintain and stay current (Moore's Law)?
- What are the production and production management cost (supply chain)?
- What is the core competency of your organization (opportunity cost)?

### TIME TO MARKET



Using an SBC can reduce average deployment times by 80%

\*Source: Digi International

### Embedded SOMs and SBCs enables original equipment manufacturers to achieve:

**Faster Time to Market** - Wireless connectivity and certification hurdles lengthen product-development cycles. Smart, connected device makers want proven components so they can bring products to market faster.

**Connected** - Smart devices need to be connected—in most cases wirelessly. Connectivity enables OEMs to access and manage devices remotely. Digi offers a wide array of short and long range wireless connectivity options that integrate with our SOMs and SBCs.

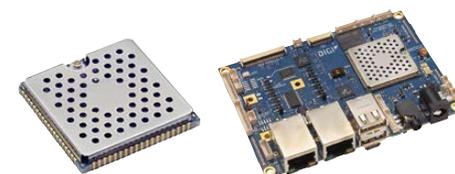
**Simplicity** - Sophisticated devices require simpler interfaces. Arcane codes and keypads are shifting to visual displays and touchscreens—requiring greater computing power.

**Reliability and Longevity** - Embedded devices must withstand daily intensive use in critical situations over a period of years. Manufacturers need stable, long-term availability of components and parts to ensure a lengthy product lifecycle.

Digi International has many SBC options ready to deploy. Need something customized or build-to-suit, our Wireless Design Services has years of experience and a library of proven IP to build exactly to your specs.

## System of Modules (SoM) and Single-Board Computers (SBC)

SOMs give OEMs the hardware platform and BSP software in a compact form factor. While SBCs connect all the peripheral I/O and power further accelerating the development cycle.



## Digi TrustFence®

Digi TrustFence is a device security framework that simplifies building secure connected products. Designed for the long product life cycles of embedded devices, TrustFence allows you to easily integrate device security, device identity, and data privacy capabilities, resulting in dramatically accelerated time-to-market and continued focus on performance and scalability. Digi TrustFence is engineering security into IOT devices that can grow and adapt with new and evolving threats.



## Digi TrustFence delivers built-in security with a full range of features including:

**Secure Boot** - Ensures only signed software images can run on a device

**Encrypted Storage** - Local file system encryption keeps internal device data safe

**Protected Ports** - Access-controlled internal and external ports prevent unwanted “back doors”

**Configuration** - Best Practices and Monitoring Support and guidelines for properly securing a device. Furthermore, Digi monitors security threats and issues alerts and notifications.

## Worldwide Deployment & Connectivity Options

- Pre-certified for use in various regions of the world
- Wi-Fi 802.11a/b/g/n/ac, Bluetooth 4.2, and integrated dual 10/100 Ethernet connectivity

## Embedded Software

The IOT is bringing software to devices not typically thought of as computers. Board Support Packages (BSP) for Yocto Linux, Android, and Windows Embedded allowing OEMs to choose the best embedded operating system for their application.

