60 Series SOM

2x2 MIMO 802.11ac and Bluetooth 4.2 System-On-Module

OUR MOST SECURE WIRELESS SUBSYSTEM EVER.

Laird's 60 Series SOM brings all of Laird's industry competence and capabilities into one solution. The SOM provides superior enterprise-class Wi-Fi connectivity with full support for 2x2 MU-MIMO 802.11ac WLAN, plus Bluetooth 4.2 dual-mode. This solution is equipped with a Cortex A5 applications processor, wireless and wired connectivity, enterprise-grade security, LCD support, and comprehensive Linux board support package (BSP).

The 60 SOM is the ideal system on module for devices that require superior connectivity. Complete with the Sterling 60 series module and Summit Software Stack, the SOM provides superior wireless connectivity in harsh RF environments. It also supports dual-Ethernet and CAN bus for wired connectivity. The 30mm x 30mm form factor and variety of interfaces allow the 60 Series SOM to be used as a wireless bridge, main processing unit, or IoT gateway.

- **Improved Wi-Fi Performance –** 2x2 MIMO 802.11ac Wi-Fi supports greater throughput via support for additional spatial streams.
- **Onboard cryptographic engine** which supports FIPS 140-2, meeting FIPS requirements with minimal performance impacts.
- **Chain of Trust Architecture** – Laird's Chain of Trust Architecture provides layers of security to mitigate attacks.
- **CVE Checking and Penetration Testing** – Laird monitors and patches for worldwide vulnerabilities and looks for new vulnerabilities, and passes improvements via software releases.
- **Reduced Time-to-Market –** Use the 60 Series SOM as the main processing unit for a fully-featured finished product
- **Fully Featured Development Kit –** prototype and design with the full suite of 60 Series SOM features before integrating with your device.

FEATURES AT A GLANCE

CONNECTIVITY AT THE CORE

The 60 Series SOM is designed with connectivity at the core; including Wi-Fi, Bluetooth, Dual-Ethernet, CAN bus, USB, UART, SPI, SD, I^2C, and GPIOs.

SIGNED AND SECURED AT EVERY LAYER

Laird's Chain of Trust Architecture creates secure modules, running approved software, with secured file systems.

THE FULL POWER OF THE SUMMIT SOFTWARE STACK

The stack provides superior performance in harsh environments, with faster channel scanning, 15x faster roaming, and 50% more consistent roaming when compared to other radios.

SOM AS A PLATFORM FOR FASTER TIME TO MARKET

The 60 Series SOM can serve as the main platform for your product, providing a feature rich base and speeding your design to market.

GLOBAL CERTIFICATIONS

Regulatory compliance for FCC, ETSI, and IC, as well as Wi-Fi Alliance certification and Bluetooth SIG Qualification.

INDUSTRY-LEADING SUPPORT

Laird's Tier 2 and FAE support bring expert assistance to your integration, working with you and Laird engineering to reduce your time to market.

APPLICATION AREAS

- Healthcare and Medical Devices
- IoT Bridging / Gateways
- Industrial Environments

Interested in Laird's 60 Series SOM?
Contact us at sales@lairdconnect.com

Shared Specifications

Category	Feature	Specification
Chipset	**Wireless Interface**	Marvell 88W8997/88PG823
Interfaces	**Peripheral Interfaces**	TFT LCD Display 1x MMC/SD/SDIO Card Port 2x SPI Master 2x I^2C ADC & GPIOs 2x USB Host Ports 1x CAN 2.0 bus
	Bridging Interfaces	1x 10/100 Ethernet (RMII) 1x 10/100/1000 Ethernet (RGMII) 3x UART Lines 1x USB Device Port
	Antenna	2x U.FL Connector
Networking	**Wi-Fi**	802.11ac Wave 2, 2x2 MU-MIMO w/Laird's Summit Software Stack Adaptive Worldwide Mode
	Bluetooth	Bluetooth 2.1 EDR + 4.2 BLE (Bluetooth 5 Ready)
	Ethernet	1x 10/100/100 w/ IEEE 1588 1x 10/100
Security	**FIPS-140-2**	Hardware accelerated via on-board hardware cryptographic engine
	Standards	WEP, WPA, WPA2
	Encryption	WEP (RC4), TKIP (RC4), AES (Rijndael), Encryption Key Provisioning, Static, PSK
	Dynamic	802.1X Extensible Authentication Protocol Types (EAP-FAST, EAP-TLS, EAP-TTLS, PEAP-GTC, PEAP-MSCHAPv2, PEAP-TLS, LEAP)
Software	**Development Tools**	Precompiled SDK, toolchain, and development images Support to build your own image or SDK Host Communications API Eclipse Plugin
	Radio Management	Laird Connection Manager, Web API, and touchscreen configuration via attached peripheral
Physical	**Dimensions**	30 mm x 30 mm x 2.8 mm (1.18 in x 1.18 in x .11 in)
	Weight	5 g (.0011 lbs)
Environmental	**Operating Temperature**	-30° to +85°C (-22° to +185°F)
Regulatory	**Approvals**	FCC / IC / CE / Giteki / KCC

For full specifications on the 60 Series SOM, please see the 60 SOM datasheet.

Ordering Information

Part	Description
453-00003	60 Series SOM
455-00003	Development board for the 60 Series SOM
455-00004	LCD touchscreen for the 60 Series SOM development board (add-on)