Specification Data

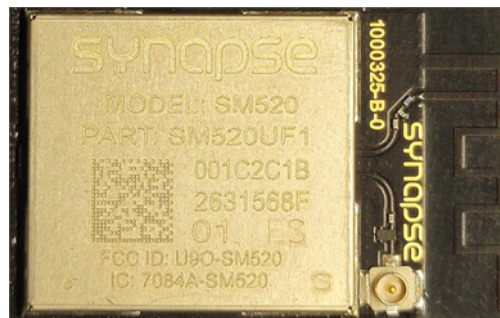|	
Job Name	
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Comments	

PRODUCT OVERVIEW

The SM520UF1 is an IEEE 802.15.4, low-power, highly reliable solution for embedded wireless control and monitoring networks requiring high data rates. It embeds Synapse's SNAP OS, a wireless mesh network operating system, into the Silicon Labs Mighty Gecko EFR32MG12 single-chip 32-bit ARM® Cortex®-M4 core with an integrated transceiver that delivers up to 250Kbits/sec. The Mighty Gecko SoC also includes an integrated power amplifier and LNA for increased range.

KEY FEATURES:

- Integrated On-board Compact F Antenna or U.FL connector for External Antenna
- SNAP auto-forming, auto-healing Mesh Network
- Up to 250 kbps radio data rate
- 2.4 GHz RF Frequency, License-free band
- Spread Spectrum (DSSS) technology
- Surface Mount, 8x8 Land Grid Array footprint
- Secure over-the-air software upgrades
- Secure AES128 Encryption
- Supports Low power/Sleep mode down to 1.55 uA

To learn more call, or visit:
synapsewireless.com (877) 982-7888

WIRELESSLY CONNECT, CONTROL, AND MONITOR

Product #	Description
SM520UF1	Surface-Mount SNAP Radio Module

Dimensions	1.17" x 0.75" (29.8mm x 19mm)
Operating Temp	-40°C to 85°C
Radio	SNAP 2.4GHz; 802.15.4 +19dBm Transmit power -102dBm Receive Sensitivity
Range (Line of Sight)	Up to 500 feet (Integrated Antenna), or up to 2000 feet (External Antenna)
Processor	32-bit ARM® Cortex®-M4 core with 40 MHz maximum operating frequency
IO	Up to 38 that can be used as GPIO, ADC, or PWM
Memory	1MB flash, 64KB free for over-the-air uploaded User Apps; 4K internal EEPROM
UARTs	2 ports
Input Voltage	2.0 to 3.6VDC
Certifications	FCC/IC
Warranty[1]	1 Year

RADIO

Footnotes:
1. See www.synapsewireless.com/warranty for warranty term

SYNAPSE