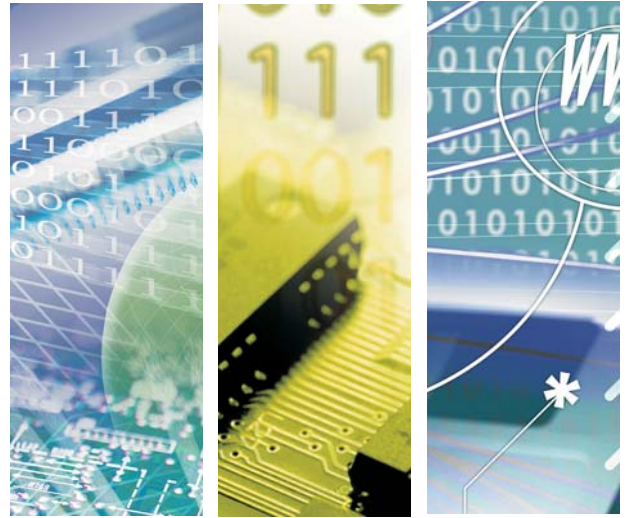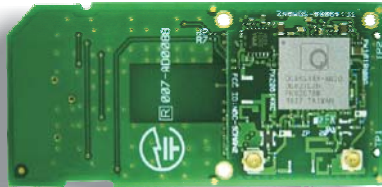# CEV906
802.11a/b/g/n Module with Bluetooth

CEV906

High Performance on 802.11a/b/g/n

Introduction of Products

Bointec CEV906 is a dual-band 802.11a/b/g/n plus Bluetooth SDIO card that is based on the CEV906 (Qualcomm Atheros AR6234). CEV906 is mechanically designed in a SD card form factor to provide customers with a vendor independent form factor.

The CEV906 is the only Freescale-recommended wireless connectivity solution for the i.MX 6 evaluation platform which includes integrated radio software support (driver and security supplicant). Integrates an external 5 GHz Front End Module (FEM) and is individually tuned to optimize WLAN performance.

Bointec provides superior product quality. CEV906 has validated that our design meets IEEE standards and each module is individually tested during the production process. This ensures that each of our products will perform to our published specification.

Product Highlight

- IEEE 802.11a/b/g/n conformity (2.4GHz & 5GHz)
- Supports IEEE802.11e, IEEE802.11d and IEEE 802.11h
- 2 spatial data stream system (2T2R)
- 2.4 GHz : Support 20 MHz bandwidth mode (Link rate 150 Mbps)
- 5 GHz : Support 20/40 MHz bandwidth mode (Link rate 300 Mbps)
- Link Data Rates
  · 802.11b/g 1-54 Mbps
  · 802.11a 6-54 Mbps
  · 802.11n 2.4GHz MCS0-7
  · 802.11n 5GHz MCS0/8-7/13
- Bluetooth 4.0 BR/EDR/LE Smart Ready compatible. Backward-compatible to 1.x, 2.x, 3.0.
- SDIO2.0 as the Wireless LAN host interface
- UART as the Bluetooth host interface
- +3.3V main power supply and selectable +1.8V/+3.3V IO power supply
- EU RoHS directive 2011/65/EC (Lead Free) compliant
- Selectable the ad-on antenna and the chip antenna (Option)
- SD card form factor

BOINTEC WIFI CEV906 ENG v0.1

Chipset	Qualcomm Atheros AR6234
Host Interface	SDIO V 2.0 (4-bit, 1-bit)
Operating Voltage	3.30 VDC +/- 5%
Radio Specications	802.11b/g/n 2.412 - 2.484 GHz / 802.11a/n 5.18 - 5.825 GHz
Baseband Specications	CSMA/CA media access; DSSS, OFDM
Bluetooth Specications	BT3.0+HS, BT4.0, Class 1.5
Operating Temperature	-10 to +70 degrees C
Dimensions	24.0 x 51.0 x 5.8 mm (W x H x D)
Connector Type	SD Card Edge 9 Pins / FFC Connector 20 Pins

| General Specications |
|---|
| On-Chip Functionality: Single-chip MAC/BB/RF/PA/LNA |
| Frequency Band: 2.4 GHz / 5 GHz |
| Network Standard: 802.11a, 802.11b, 802.11g, 802.11n(1-stream) |
| Modulation Modes: OFDM (64QAM, 16QAM, QPSK, BPSK), |
| DSSS (CCK, DQPSK, DBPSK), DSSS-OFDM |
| (64QAM, 16QAM, QPSK, BPSK) |
| Hardware Encryption: WEP, WPA/WPA2 (TKIP/AES-CCMP), WAPI |
| Quality of Service (QoS): WMM, WMM-PS, 802.11e |

| Interfaces |
|---|
| Communications: SDIO 2.0 |
| Supported Data Rates: |
| IEEE 802.11b 1-11 Mbps |
| IEEE 802.11g 6-54 Mbps |
| IEEE 802.11a 6-54 Mbps |
| IEEE 802.11n HT20 6.5 - 65.0 Mbps |
| IEEE 802.11n HT40 13.5 - 135.0 Mbps |
| Bluetooth: BDR/EDR/LE |
| Physical Specications: 24.0 x 51.0 x 5.8 mm (W x H x D) |

Driver Support
Linux
Android
Windows Embedded Compact 7
QNX Neutrino
Green Hills Intergrity

Product quick glance
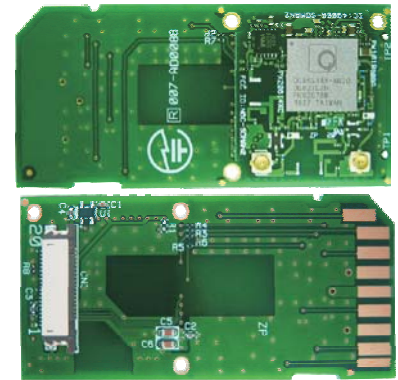
ME Drawing/placement

Top View
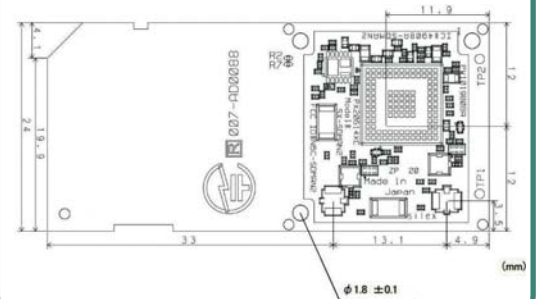
ME Drawing/placement

Bottom View
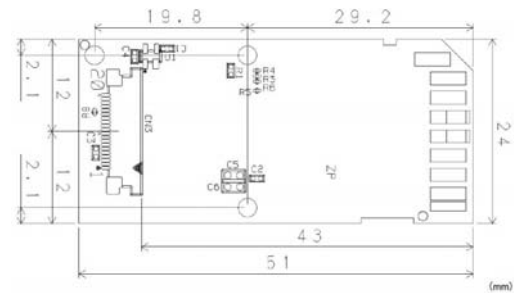
Ordering Information

PART NUMBER	DESCRIPTION
T.CFN906A-DK	CFN906A-DK,Single packed, development kit packed
TFGA-CEV90600-51	finished non packaing,Silex,CEV906
TFGA-CFN905A0-52	finished packaing,Silex,CFN906

Bointec Authorized Distributer