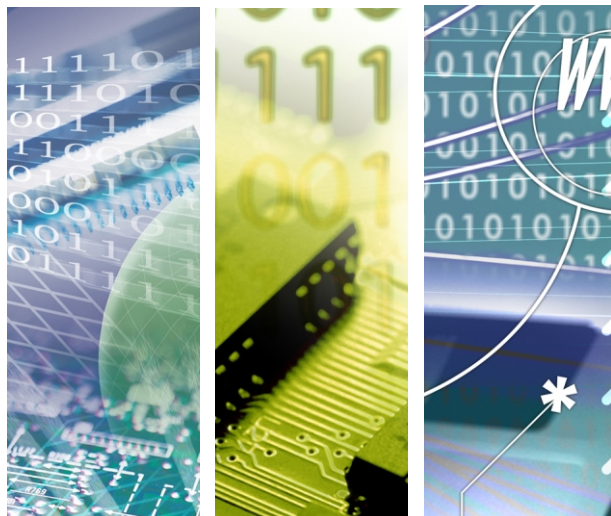
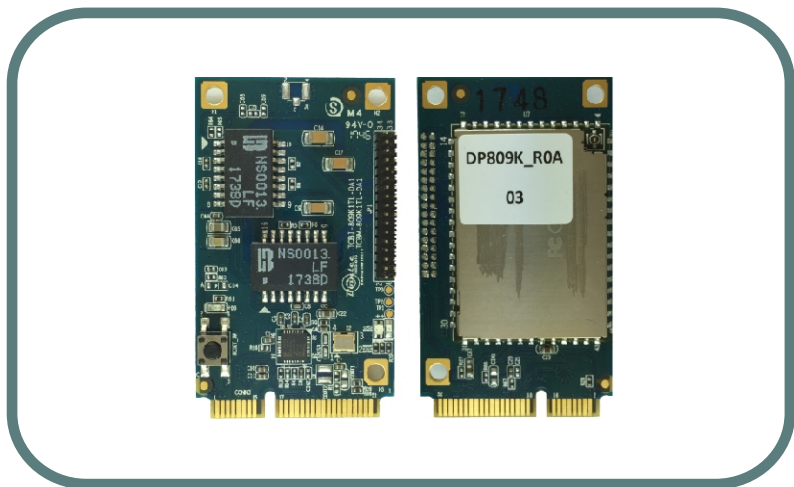




# DP809K

WLAN IEEE 802.11bgn Access Point Module



DP809K

802.11bgn 1x1, with Ethernet Interface, miniPCIe form factor module

## Introduction of Products

Bointec DP809K is a hardware access point module for x86, Freescale, MIPS based industrial PC to have Access Point feature without porting WiFi driver in the host CPU platform. use Bointec CSW861K, an Mediatek MT7688 based low-power consumption IoT AP SoC based integrate Wi-Fi single chip solution, DP809K supports IEEE 802.11b/g/n stream, providing GPIO for intelligent control, and UART interfaces for device communication with access point/wifi repeater, wifi client feature.

This completes networking platform enables any kind of electronics to add full-featured Wi-Fi to a wide variety of products with minimal development effort and cost. DP809K supports a network stack along with SSL security, enabling full-featured internet connectivity and reliable information exchange in a small, low-cost system.

## Product Highlight

- Ethernet Adapter chipset to talk to host CPU, such as Freescale, x86, MIPS and others hardware platform
- Embedded IEEE 802.11 b/g/n drivers, supplicant, and TCP/IP stack with 802.11v
- Embedded MIPS24KEc (575/580 MHz) with 64 KB I-Cache and 32 KB D-Cache
- 1T1R 2.4 GHz with 150 Mbps PHY data rate
- Legacy 802.11b/g and HT 802.11n modes
- 20/40 MHz channel bandwidth
- Green AP/STA – Intelligent Clock Scaling (exclusive) – DDRII: ODT off, Self-refresh mode
- 1-port 10/100/1000 FE PHY
- 1 USB 2.0 Host, I2C, UART, GPIO
- 16 Multiple BSSID
- WEP64/128, TKIP, AES, WPA, WPA2, WAPI
- AP/STA Firmware: Linux 2.6.36 SDK, OpenWrt 3.10



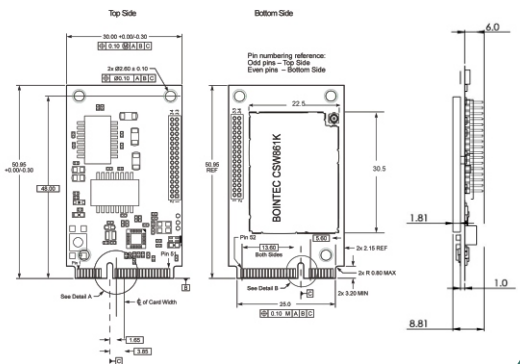
# Specification

Feature	Specification
<b>General</b>	
Processor	Mediatek® MT7688AN, MIPS24KEc
Clock Speed	580MHz
Memory	DDR2 128MB
Flash	32MB
Bandwidth	HT20 and HT40
Antenna	External antenna via IPEX connector (Optional) 1T1R
Interfaces	UART
	GPIO
	I2C
	USB(host)
	Ethernet
<b>WiFi</b>	
Standard	IEEE 802.11 b/g/n
Frequency band	2.4GHz (2.412 GHz to 2.484 GHz)
Internet Protocols	IPv4, TCP/UDP, ARP/NDP, DHCPv4,
Security Protocols	WPA, WPA2-PSK, WEP46/128, TKIP, AES, WAPI
QoS Protocols	WMM, WMM-PS
<b>Power Consumption</b>	
Operating Voltage	3.3 V ± 0.05V
Power Consumption	Transmit: 250 mA @16dBm
	Receive: 75 mA (typical)
	Power saving mode(DITM=1): 1.09mA
	Standby mode(Sleep): 130uA
<b>Dimension</b>	
PCB Size	30 x 50.95 x 8 mm
<b>Environmental</b>	
Operating Temperature	Industrial: N/A
	Commercial: -10°C ~ +55°C
Storage Temperature	Industrial: N/A
	Commercial: -40°C ~ +85°C
Operating Humidity	Operating humidity: 10-80%

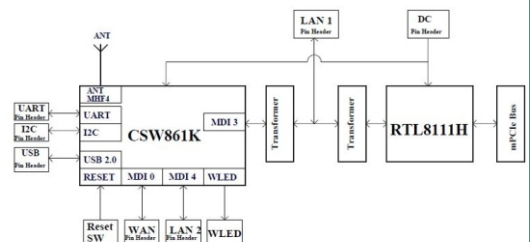
## Product quick glance



## ME Drawing/placement



## Block Diagram



## Ordering Information

PART NUMBER	DESCRIPTION
TFGA-DP809K0-11	Finished non packing, ODM, DP809K



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