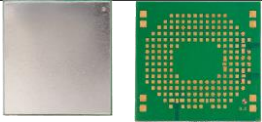
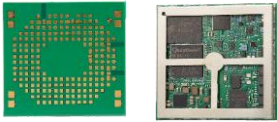
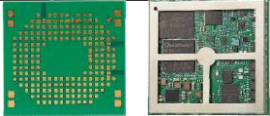
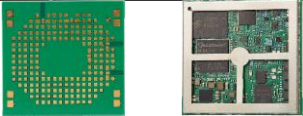
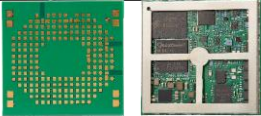


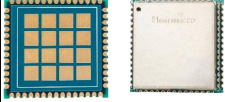
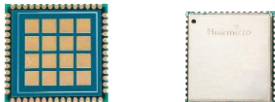
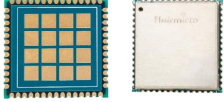
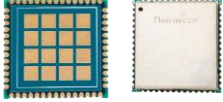
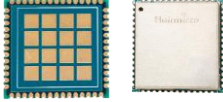
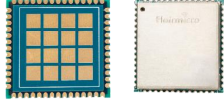
Produktübersicht

FLC

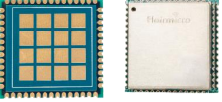
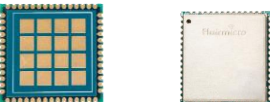
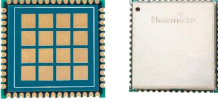
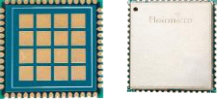
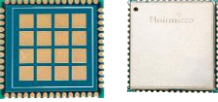
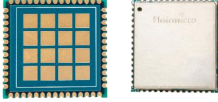
Cellular Modules

					
	MCM530IL1B	MCM630IL1A	MCM63MIL1B	MCM63MAL1C	MCM83X
Chipset	MDM9215+PM8018+WTR1605	MDM9215+PM8018+WTR1605L	MDM9607+PM9607+WTR2965	MDM9628+PM9628+WTR2965	DM9206+PM9607+WTR2965
Form factor	LGA	LGA	LGA	LGA	LCC
UART	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GPS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Glonass	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
I2S	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
I2C	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PCM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Flash	4Gb	4Gb	4Gb	4Gb	1Gb
RAM	2Gb	2Gb	2Gb	2Gb	1Gb
Temperature	-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
max Voltage	DC 4.2v	DC 4.2v	DC 4.2v	DC 4.2v	DC 4.2v
Dimension	36mm*38mm*3.5mm	36mm*38mm*3.5mm	36mm*38mm*2.95mm	36mm*38mm*2.95mm	26mm*24mm*2.6mm

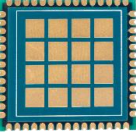
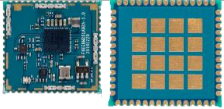
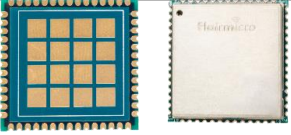
Combo Modules

						
	CBM283	CBM286	CBM287	CBM383	CBM386	CNM387
Chipset	WL1837	WL1833	WL1831	WL1877	WL1873	WL1871
Bluetooth	v.4.0	v.4.0	v.4.0	v.4.0	v.4.0	v.4.0
Wifi mode	802.11a/b/g/n	802.11a / b/g/n	802.11b/g/n	802.11a/b/g/n	802.11a / b/g/n	802.11b/g/n
Form factor	QFN	QFN	QFN	QFN	QFN	QFN
UART	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GPS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Glonass	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
SDIO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PCM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Temperature	-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	-40°C to +85°C
max Voltage	DC 4.8v	DC 4.8v	DC 4.8v	DC 4.8v	DC 4.8v	DC 4.8v
Dimension	21mm*20mm*2.5mm	21mm*20mm*2.5mm	21mm*20mm*2.5mm	21mm*20mm*2.5mm	21mm*20mm*2.5mm	21mm*20mm*2.5mm

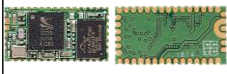




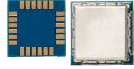


Combo Modules

						
	CBM283	CBM286	CBM287	CBM383	CBM386	CNM387
Chipset	WL1837	WL1833	WL1831	WL1877	WL1873	WL1871
Bluetooth	v.4.0	v.4.0	v.4.0	v.4.0	v.4.0	v.4.0
Wifi mode	802.11a/b/g/n	802.11a / b/g/n	802.11b/g/n	802.11a/b/g/n	802.11a / b/g/n	802.11b/g/n
Form factor	QFN	QFN	QFN	QFN	QFN	QFN
UART	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GPS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Glonass	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
SDIO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PCM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Temperature	-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	-40°C to +85°C
max Voltage	DC 4.8v	DC 4.8v	DC 4.8v	DC 4.8v	DC 4.8v	DC 4.8v
Dimension	21mm*20mm*2.5mm	21mm*20mm*2.5mm	21mm*20mm*2.5mm	21mm*20mm*2.5mm	21mm*20mm*2.5mm	21mm*20mm*2.5mm

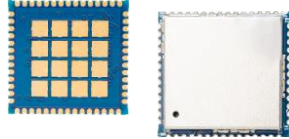


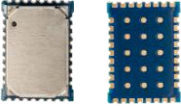
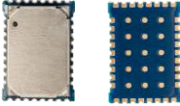
Combo Modules

			WIFI+BLE+MCU
CBM231	CBM252	CBM270	CBM273
QCA6574	BCM88373	FLC order	FLC order
V4.2	v5.0	V4.2	BLE5.0
802.11a/b/g/n/ac	802.11a/b/g/n / ac	802.11a/b/g/n/ac	802.11a/b/g/n
QFN	QFN	QFN	QFN
☑	☑	☑	☑
✘	✘	✘	✘
✘	✘	✘	✘
☑	☑	☑	✘
☑	☑	☑	✘
-40°C to +85°C	-40°C to +85°C	-40°C to +85°C 0°C to +70°C	0°C to +70°C
DC 4.8v	DC 4.8v	DC 5.5V	DC3.6V
21mm*20mm*2.5mm	21mm*20mm*2.5mm	21mm*20mm*2.5mm	(Estimated size) 28mm*20.5mm

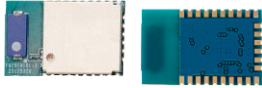
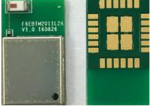

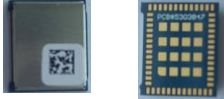
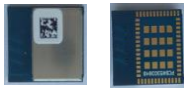

Bluetooth Module

								
	BTM501	BTM809	BTM069	BTM701	BTM702	BTM815	BTM818	BTM901
Chipset	CSR-BC5MM based	CSR8670	RDA5856	QCC3006	QCC3007	CSR8645	CSR8350	QCC512x
Bluetooth	v2.1	v.4.0	v.4.2	v.5.0	v.5.0	v.4.0	v.4.1	V5.0
USB	☑	☑	✘	☑	☑	☑	☑	☑
I2S	☑	☑	✘	✘	✘	✘	✘	☑
I2C	✘	☑	✘	✘	✘	✘	☑	☑
PCM	☑	☑	✘	☑	☑	☑	☑	☑
UART	☑	☑	☑	☑	☑	☑	☑	☑
maximum output power	✘	7 dBm	0 dBm	9 dBm	9 dBm	6 dBm	7 dBm	7dBm
Form factor	QFN	QFN	QFN	QFN	QFN	QFN	QFN	QFN
Temperature	✘	-40°C to +85°C	-20°C to +65°C	-40°C to +85°C	-40°C to +85°C	-20°C to +70°C	-40°C to +85°C	-40°C to +85°C
max Voltage	DC 3.6v	DC 4.2v	DC 4.5v	DC 3.3v	DC 3.3v	DC 4.3v	DC 4.25v	DC 6.5V
Dimension	23.24mm*11.94mm*2.00mm	20.8mm*11.8mm*2.7mm	25.6mm*28.3mm*2.7mm	13.4mm*25.8mm*2.4mm	13.4mm*25.8mm*2.4mm	20mm x 18mm x 2.25mm	21mm*20mm*2.8mm	20.8mm*11.8mm*2.7mm

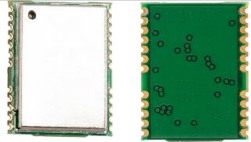
Bluetooth Module HCI

					
	BTM602	BTM805 / 804	BTM808	BTM081A	BTM081B
Chipset	CSR BC6	CSR8811 based	CSR8311	BCM89071	BCM20713
Bluetooth	v.2.1	v.4.0	v.4.0/3.0/2.1	v.4.1	v.4.0
USB	✗	✗	☑	✗	✗
I2S	☑	☑	*2	✗	✗
I2C	✗	✗	✗	☑	☑
PCM	☑	☑	*2	☑	☑
UART	☑	☑	☑	☑	☑
maximum output power	6dBm	9.5 dBm	7 dBm	8 dBm	8 dBm
Form factor	QFN	LGA	QFN	QFN	QFN
Temperature	-40°C to +85°C	-30°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
max Voltage	DC 3.6v	DC 5.5v	DC 4.8v	DC 5.5v	DC 5.5v
Dimension	23.24mm x 11.94mm x 2.50mm	7mm*7mm*1.5mm	20mm*14.4mm*2, 35mm	21mm*20mm*2.8mm	21mm*20mm*2.8mm

Bluetooth Low Energie


						
	BTM101	BTM201	BTM020	BTM021	BTM022	BTM091
Chipset	CSR1010 based	CSR1024	nRF52832	nRF52840	nRF52840	TLSR8258
Bluetooth	v.4.0	v.4.2	V5.0	V5.0	V5.0	V5.0
USB	✘	✘	☑	☑	☑	☑
I2S	✘	☑	☑	☑	☑	☑
I2C	☑	☑	☑	☑	☑	☑
PCM	✘	✘	✘	✘	✘	✘
UART	☑	☑	☑	☑	☑	☑
maximum output power	7.5 dBm	4 dBm	4dBm	8dBm	8dBm	0~10dBm (configuration)
Form factor	QFN	LGA	QFN	LGA	LGA	QFN
Temperature	-40°C to +85°C	-30°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
max Voltage	DC 4.4v	DC 3.6v	DC 3.6V	DC 3.6V	DC 3.6V	DC 3.6V
Dimension <small>note (special features)</small>	22.00mm*13.40mm*2.3mm	10.6mm*18mm	9.5mm x 16.5mm	11.5*9.5mm	11.5*13.5mm	21.5mm *13.0mm
		Audio capture mode G7.22 codec				

GNSS Modul



	SLM310
Chipset	HD 8020
Form factor	QFN
UART	<input checked="" type="checkbox"/>
I2C	<input checked="" type="checkbox"/>
SPI	<input checked="" type="checkbox"/>
USB	<input checked="" type="checkbox"/>
GPS	<input checked="" type="checkbox"/>
Glonass	<input checked="" type="checkbox"/>
Beidou	<input checked="" type="checkbox"/>
Temperature	-40°C to +85°C
max Voltage	DC 3.6v
Dimension	16mm*12.2mm*2.4mm

Wifi Module

	
	WFM011
<u>Chipset</u>	ESP8266
<u>UART</u>	<input checked="" type="checkbox"/>
<u>SDIO</u>	<input checked="" type="checkbox"/>
<u>I2C</u>	<input checked="" type="checkbox"/>
<u>I2S</u>	<input checked="" type="checkbox"/>
<u>SPI</u>	<input checked="" type="checkbox"/>
<u>PMW</u>	*4
<u>GPIO</u>	*7
<u>Form factor</u>	QFN
<u>mode</u>	802.11b/g/n
<u>Temperature</u>	-40°C to +85°C
<u>max Voltage</u>	DC 3.6v
<u>Dimension</u>	15.5mm*22mm*3.66mm