


Manufacture

<div><div><div></div><div>Manufacture</div></div><div><div></div><div>Chips</div></div></div>	<div><div>Manufacture Name</div><div>Dialog Semiconductor plc</div><div></div><div>Intro</div><div>a leading provider of battery management, AC/DC power conversion, Wi-Fi[®], Bluetooth[®] low energy and Industrial ICs</div><div>Website</div><div>www.dialog-semiconductor.com</div><div>Country</div><div>美国</div><div>Brand</div><div>戴乐格</div></div>
<div><div>Chips</div><div>Core Type</div><div>-</div><div>Dimension</div><div>UART</div><div>Current</div><div>Transceiver Compatible</div><div>Intro</div><div>Debugging</div><div>DSP RAM</div><div>Voice Services</div><div>Crystal</div><div>32 MHz</div><div>Power fail</div><div>no</div></div>	

Wifi

802.11n (Wi-Fi 4)

AoA/AoD

Operating Frequency [Max] (MHz)

SSI

Sensor Controller

Receiver Sensitivity

- 98.5 dBm

Upgrade Type

Manual

Package Type

-

DSP Technology

General

on chip (PLL)

no

I2S

Chip Name

DA16600

Flash (kB)

4MB

I2C

支持

Standby

Output Power

+18.5 dBm

CPU Clock Speed

Pins

DSP Clock Speed

Features

802.15.4 (Zigbee, Thread)

crystal (optional)

no

PDM

LE Audio

Type

蓝牙低功耗+Wifi
Bluetooth Version

5.1
I2S

支持
Frequency Regulation

CPU Features

Pitch

on-chip RC

32KHz RTC Crystal for Wi-Fi
PWM

Brand

戴乐格
SRAM (kB)

Real-Time Clock

no
CPU Architecture

Channels

External clock

no
Protocols

-
RADIO

SAADC

Country

美国
EEPROM (kB)

Crypto Accelerator

Programmable channels

Watchdog timer

no
TWI

no
Bluetooth 5 PHYs

-
SPIM

NFC Tag

SPI

1

Public Key Hardware Accelerator

Fixed channels

QDEC

-

bluetooth 5.1 support

Yes

SPIS

CMP

Overview

DA16600 modules provide a convenient way to add both low power Wi-Fi and low power BLE functionality to your device. The low power Wi-Fi DA16200 SoC and the low power BLE DA14531 SoC are integrated together on a single module. Together they deliver long battery life and low power consumption in a convenient form factor. As a single integrated system, functions such as Wi-Fi/BLE coexistence and provisioning Wi-Fi through the BLE connection come standard.

The modules are complete with all required components and are regulatory certified by the FCC, IC, CE and other regulatory bodies.

Features

- Low Power Wi-Fi
- Low Power BLE
- Ultra Low Power
- Wi-Fi/BLE Coexistence
- Superior Range
- Full Offload
- Simple Setup & Provisioning
- Complete Software Stack
- Leading Security
- OTA Firmware Update
- Multiple I/Os

Benefits

- VirtualZero™ DA16200 SoC
- 802.11n 1x1 low power 2.4 GHz
- Up to 72 Mbps, MCS0-7
- SmartBond TINY™ DA14531 SoC
- BT5.1 compliant BLE
- Enables year-plus battery life
- Breakthrough VirtualZero low power technology
- Virtually no power consumption in sleep state
- Ultra low power sensor wake-up

- Runs on small batteries and coin cells
- Built in, customizable, coexistence algorithms
- Wi-Fi: Industry leading output power and Rx sensitivity for max range
- BLE: 4x range of BT 4.0
- SoC runs full OS & TCP/IP stack on module
- Provision Wi-Fi connection simply with BLE
- Automatically find & configure new devices w/ smartphone app
- Comprehensive networking software stack
- Secure boot □Secure debug □Secure asset storage □Hardware accelerated □TLS □Digital certificates □Elliptic curve
- Enables field deployed device firmware updates
- UART, SPI, ADC, I2C, PWM, I2S, GPIOs, JTAG and SWD

On Board Chip Antenna

14.2 mm x 24.6 mm x 3.0 mm

External Antenna connector (u.FL)

14.2 mm x 24.6 mm x 3.0 mm

GPIO

Accelerator

Channel groups

PDM

-

Security

TWIM

Features

.Wi-Fi SoC: .DA16200

.BLE SoC: DA14531

.4MB Flash memory

.40MHz Crystal for Wi-Fi

.32KHz RTC Crystal for Wi-Fi

.32MHz Crystal for BLE

.Chip antenna or u.FL connector

.SPDT Antenna Switch

.Single power .supply voltage (3.3V)

CAN

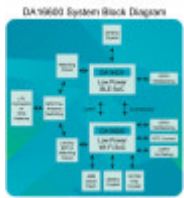
True Random Number Generator

USB

no

TWIS

Block Diagram



CAN FD

Monitor

SPI

1

UARTE

RAM(KB)

Application Note

.Thermostats .Door locks .Security cameras .Video door bells .Temperature .sensors .Smoke detectors .Other wireless sensors .Garage door openers .Pet trackers .Asset trackers .Home automation .Commercial .Industrial .Residential

Human Machine Interface

-

Quad SPI

-

NFCT

Development Board

Security Modules

Debug interface

-

LDO

no

USBD

Datasheet

[da16600_module_product_brief_20.04.28.pdf](#)

Timers [Number, bits]

no

On-chip VBUS

no

QSPI

PWM [Number, bits]

1

Image

Regulated supply for external components

-

ADC [Number, bits]

Price

0.00

DAC [Number, bits]

1 Wi-Fi, 3 BLE

RMB

□

Supply Voltage [Min to Max] (V)

3.3

Rating

no 

Analog comp

no

Ambient Operating Temperature (Min to Max) (°C)

low-power comp

no

Cache

-

Junction Temperature (Min to Max) (°C)

Temperature sensor

no