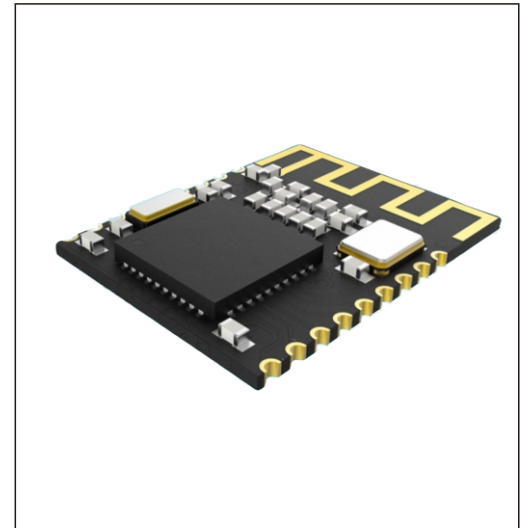


NayaWaveTM Engine

NayaWaveTM Engine is a powerful, highly flexible, low power Bluetooth low energy module based on the CC2541 SoC from Ti. It enables robust network nodes to be built with low total BOM costs. The CC2541 combines the excellent performance of a leading RF transceiver with an industry-standard enhanced 8051 MCU, in-system programmable flash memory, 8-KB RAM, and many other powerful supporting features and peripherals. NayaWaveTM Engine is designed to work specifically with mobile APP base on the application as of below



FEATURES

2.4-GHz Bluetooth low energy Compliant
Supports 250-kbps, 500-kbps, 1-Mbps, 2-Mbps Data Rates

Programmable Output Power up to 0 dBm
Excellent Receiver Sensitivity (-94 dBm at Decoding 1 Mbps)

Suitable for Systems Targeting Compliance

APPLICATIONS

LED lighting - On/Off, Dimming

LED lighting - CCT changable

LED lighting - Colors mixing

Smart lock

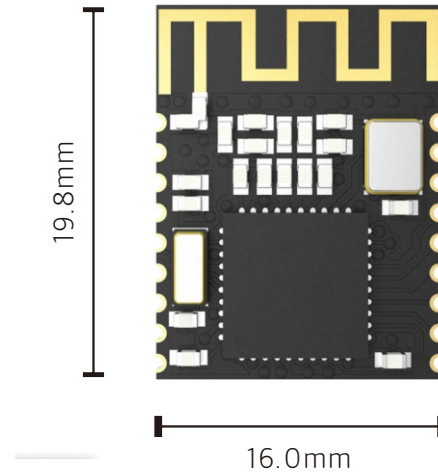
Smart lighting with sensors

SPECIFICATION

Summary	
Product Name	NayaWave™ Engine
Input Voltage	2 - 3.6VDC
Low Power Consumption	~20mA
Operating Frequency	2400 - 2483.5Mhz (ISM)
RF Tx	~0dBm
RF Rx	-95dBm
PWM Channel(s)	4 PWM
PWM Frequency	0.96Khz
Operating Temperature	-30°C - 70°C
Storage Temperature	-30°C - 70°C
Relative Humidity	80%

*Bluetooth Range is dependent on the integration of fixtures, surrounding environment and conditions.

PHYSICAL DIMENSIONS



PIN DESCRIPTION

Pin #	Name	Description
1	GND	GND
2	P2_2	
3	P2_1	
4	P2_0	
5	P1_7	WARM / GREEN
6	P1_6	COOL / RED / DIM
7	VDD	VCC
8	SCL	
9	SDA	
10	P1_5	
11	P1_4	

Pin #	Name	Description
12	P1_3	
13	P1_2	
14	P1_1	WHITE
15	P1_0	BLUE
16	PO_7	
17	PO_6	
18	PO_3	
19	PO_2	
20	PO_1	
21	PO_0	
22	RST	

■ ORDERING CODE

Family	Technology	-	Source	Volatge	Version	-	Model	-	Reserved
NYW	XX	-	XX	XXXX	XX	-	XX	-	XXXX
	BL=BLE		AC=AC	PWM2=2CH PWM	EU=EURO		01=Model 1		0000
			DC=DC	VOLT=0-10V	US=AMERICA		02=Model 2		
			BA=BATTERY	SWIT=SWITCHES	GL=GLOBAL		05=Model 5		

■ PRODUCTS LIST

PRODUCTS	FUNCTION	DESCRIPTION
NYWBL-DCPWM1GL-01-0000	PWM	Single channel PWM output, supports On/Off and dim
NYWBL-DCPWM2GL-01-0000	PWM	2 Channels PWM output, supports tunable white (CCT changing)
NYWBL-ACVOLTGL-01-0000	0-10V	0-10V output, can be connected up to 10 LED drivers for dimming.
NYWBL-DCPWM4GL-01-0000	PWM	4 Channels PWM output, supports RGBW color mixing
NYWBL-BASWITEU-01-0000	SWITCHES	Standard EU Wall switches, 4 buttons can be configured different functions
NYWBL-BARCONGL-01-0000	REMOTE	Handheld remote control, battery-operated, 4 buttons, 3-models
NYWBL-DCMODLGL-01-0000	MODULE	BLUETOOTH 4.X Module for NayaWave™ solution

■ DISCLAIMER

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.