

# UARTDNG101

**Bluetooth** wireless Plug In module  
 Class2 10m Range

3.3V or 5V power supply

Data communication

Serial 5V Uart

Serial 3.3V Uart

N.8 IO signals

Standard or custom Firmware

OEM version on request



## Description

The UARTDNG101 is a professional, slim, wireless module ready for integration in brand new or existing electronic products.

Based on CSR Chipset has PCB inverted F antenna and 3,3 voltage regulator

## Applications

UARTDNG101 allows you to cut the cables using wireless communication with PC, Pda, Mobile phone...

It's suitable for integration in microprocessor systems without operative system since it doesn't need drivers to work.

- Industrial CNC
- Medical devices
- Fitness Machines
- Professional GPS systems
- Telemetry systems
- Sensors
- Your application

## Mechanical and electrical

Dimensions	44 X 32 X 3 mm
Connector	28 pin, pitch 2.54m, male pinstrip
Power supply	5V or 3.3V
Current	80 mA (Max on RF burst)

### Pin assignment and description

Pin	Name	In Out	Description
1	GND	In	Ground (0V)
2	+3.3V	In	Input (or regulated output if there's power supply on Pin 3)
3	+5V	In	Input (or not connected if there's power supply on Pin 2)
4	Reset	In	Reset the module
5	MISO	Out	SPI programming MISO signal
6	CSB	In	SPI programming CSB signal
7	CLK	In	SPI programming CLK signal
8	MOSI	In	SPI programming MOSI signal
9	UART_CTS_R	In	Input UART CTS +3.3V
10	UART_TX_R	Out	Output UART TX +3.3V
11	UART_RTS_R	Out	Output UART RTS +3.3V
12	UART_RX_R	In	Input UART RX +3.3V
13	NC	-	NC
14	UART_TX_5	Out	Output UART TX +5V
15	UART_RTS_5	Out	Output UART RTS +5V
16	NC	-	NC
17	PCM_OUT	Out	Audio PCM Output
18	PCM_SYNC		Audio PCM Sync
19	PCM_IN	In	Audio PCM Input
20	PCM_CLK		Audio PCM Clock
21	PIO7	In/Out	Digital I/O #7 (Firmware defined)
22	PIO6	In/Out	Digital I/O #6 (Firmware defined)
23	PIO5	In/Out	Digital I/O #5 (Firmware defined)
24	PIO4	In/Out	Digital I/O #4 (Firmware defined)
25	PIO3	In/Out	Digital I/O #3 (Firmware defined)
26	PIO2	In/Out	Digital I/O #2 (Firmware defined)
27	PIO1	In/Out	Digital I/O #1 (Firmware defined)
28	PIO0	In/Out	Digital I/O #0 (Firmware defined)

**Power**      Connect    Power    supply    (5V    or    3.3V)    and    GND

**Serial**      For UART +5V system : connect output signals UART\_RTS\_5 (if needed) and UART\_TX\_5. Connect input signals UART\_CTS (if needed) and UART\_RX (these pins are 5V tolerant).  
 For UART +3.3V system : connect output signals UART\_RTS (if needed) and UART\_TX. Connect input signals UART\_CTS (if needed) and UART\_RX.

**IO**            8 IO pins are available. These pins can be used to turn on/off external devices, to send informations to a microprocessor, to turn on led, buzzer...  
 These pins are firmware controlled

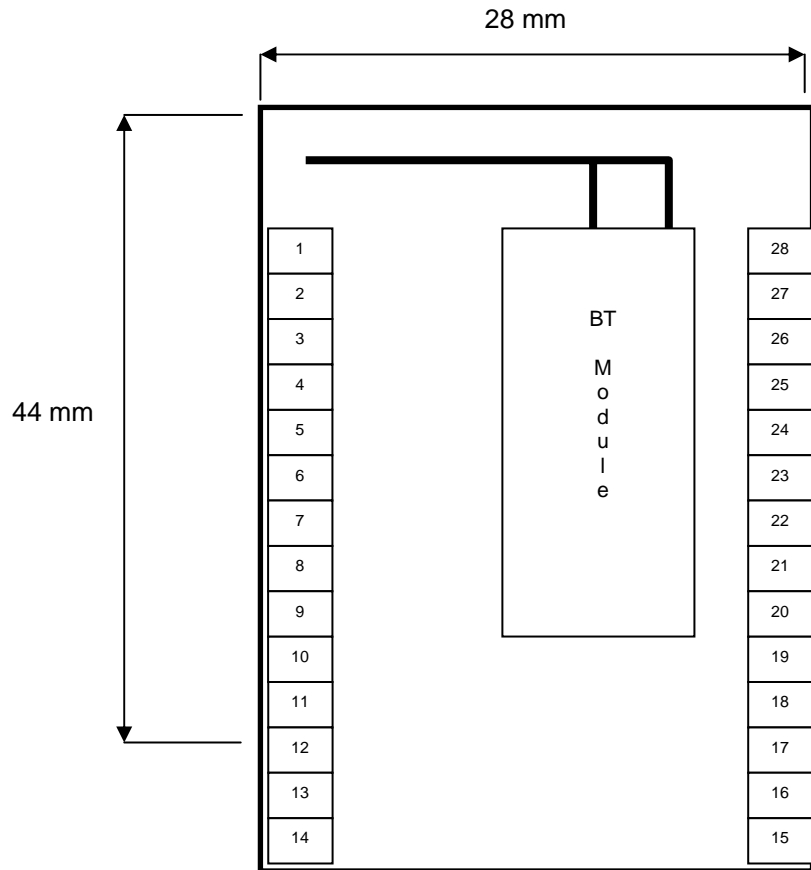
**SPI**            These 4 signals are used for firmware upgrade

**Electrical**

Current Consumptions (Power supply 3,3V)  
 SCO connection HV3 (1s interval sniff mode) (Slave) 28 mA  
 SCO connection HV1 (Slave) 53 mA  
 ACL data transfer 115.2kbps UART (Master) 15 mA  
 ACL connection, Sniff Mode 40ms interval, 38.4kbps UART 4 mA  
 ACL connection, Sniff Mode 1.28s interval, 38.4kbps UART 0.5 mA  
 Parked Slave, 1.28s beacon interval, 38.4kbps, UART 0.6 mA  
 Deep Sleep Mode 15 uA  
 Peak current during RF burst 80 mA

Temperature Range  
 Storage -40°C +105°C  
 Operation -40°C +105°C

**Mechanical drawing**



**Order informations**

To order UARTDNG101 please send us a description of your system and we'll suggest you the best firmware solution.

We can ship UARTDNG101 with Male Pinstrip connector or without any connector (For direct wire soldering)

Custom hardware version are available under request.

Firmware on UARTDNG101 can be updated using our DEVBOARD

Contact us directly or contact our local reseller