



FlexiPanel

Puck Enclosure

Externally mounting enclosure for LinkMatik, Toothpick, EasyBee and Pixie



Features

- RF generated inside antenna – no coax losses.
- No FCC / CE re-certification required.
- Waterproof.
- Unobtrusive.
- All external connections via hollow mounting bolt.
- Single, central mounting-hole 16mm diameter. Mounting surface may be up to 8mm thick.
- Connections via a 20-way ribbon cable 1.27mm pitch, supplied 50cm long.
- Enclosure dimensions 98mm x 45mm x 22mm excluding mounting bolt.

Notes

Enclosure contains a base plate which electrically conducts to the hollow bolt. It is recommended that this is connected to power supply ground, if feasible, for optimum RF performance.

For good weatherproofing performance, use a generous quantity of sealant around the gasket edge and around the mounting bolt.

Toothpick has 32 connections; the ribbon cable has only 20. In its default configuration, several cable connections connect to more than one Toothpick pin. Refer to the *Ribbon Cable Connections* section.

A voltage regulator may be fitted on request.

Summary

This innovative puck enclosure combines the utility of weather-tight external mounting with the efficiency of locally generated RF signals. Digital connection is via a ribbon cable.

The enclosure can be supplied with any of the following radio modules. The case, without cable or circuit board, is also available for bespoke applications.

- Pixie ZigBee module.
- Pixie Lite ZigBee module.
- EasyBee IEEE 802.15.4 module.
- LinkMatik 2.0 Bluetooth module.
- Toothpick 2.0 Bluetooth module.
- Toothpick Lite Bluetooth module.

Ordering Information

Table 1. Ordering information	
Part No	Description
Puck EasyBee	EasyBee in sealed in Puck enclosure
Puck Pixie	Pixie in sealed Puck enclosure
Puck Pixie Lite	Pixie Lite in sealed Puck enclosure
Puck LinkMatik	LinkMatik SO in sealed Puck enclosure
Puck Toothpick	Toothpick in sealed Puck enclosure
Puck Toothpick Lite	Toothpick Lite in sealed Puck enclosure
Note due to the number of variations, not all items are always in stock and may require lead times of up to 4 weeks	

Manufactured to ISO9001:2000



Connector Pinout

The cable is fitted with a connector type MicroMaTch AMP Male Cable-side 20 way, Farnell part number 149093. This mates with PCB mounted connector type MicroMaTch AMP Female PCB 20 way, Farnell part number 148672. Alternatively, the connector may be removed for direct connection to the 1.27mm pitch ribbon cable. (Connector not shown in photo.)

Cable number	Connection				
	Pixie	Pixie Lite	EasyBee	LinkMatik 2.0 (Note 1)	Toothpick 2.0, Toothpick 2.0 Lite
1 (red)	RE2	n.c.	n.c.	PIO6 / Reset (Note 6)	AN1, PCMS (Note 5)
2	RA3	RA3	n.c.	PCMS	CCP1
3	RA2	RA2	n.c.	PCMC	AN2, PCMC (Note 5)
4	RA1	RA1	n.c.	PCMI	AN7, PCMI (Note 5)
5	RA4	RA4	FIFOP	CTS	AN8, NMCLR (Note 5)
6	RB5	RB5	CCA	PCMO	AN6, PCMO (Note 5)
7	RB4	RB4	SFD	RxD	SDO, AN10 (Note 4)
8	RA0	RA0	Resetrn	RTS	SDA, AN11 (Note 4)
9	SDI	SDI	SO	Gnd	AN4
10	SCL	SCL	SCK	Vdd	AN3
11	Gnd	Gnd	Gnd	ESC / PIO3	AN5
12	Vdd	Vdd	DVdd	ATN / PIO2	CCP2
13	SDO	SDO	SI	PIO7	CCP4
14	RC7	RC7	VregEn	PIO4	TxD
15	RE0	Gnd	FIFO	nCSB	Gnd/Vss
16	RC6	RC6	CSn	TxD	AN0, RxD (Note 4)
17	RB7	RB7	Gnd	SCLK	INT1
18	RE3	RE3	n.c.	MISO	INT0, CCP5 (Note 4)
19	RB6	RB6	n.c.	MOSI	SCL, CCP3 (Note 4)
20	RE1	n.c.	n.c.	PIO5	Vdd
none	Vunreg (Note 2)	Vunreg (Note 2)			AN9 (Note 3), Vin (Note 2)

n.c. = not connected

1. SO version of module, 3V3 power and logic levels only.
2. Regulator not fitted.
3. AN9 is permanently grounded.
4. Normally supplied with both pins connected. Connection one pin only is possible by special order.
5. NMCLR, PCMO, PCMI, PCMC, PCMS are not normally connected. Connection to this pin is possible by special order, as is disconnection of the other input.
6. Reset is normally connected to Gnd but may be connected to this line by special request.



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