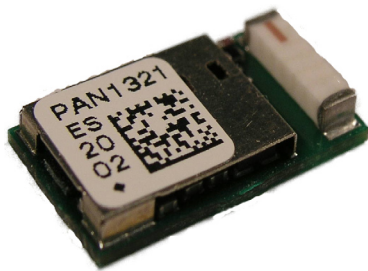


Bluetooth-Module PAN1321



(Module with shielding)

OUTLINES - ENW89811J4CF

Now you can integrate Bluetooth very easy in your final product, with the PAN1321-SPP as a full Bluetooth system solution.

In comparison to our pin compatible HCI solution (PAN1310), there is no longer a powerful host needed.

The PAN1321 is manufactured in a 15,6 x 8,7 x 2.8 mm³ SMD LGA package with shielded case and will be qualified to the Bluetooth 2.0 standard.

Due to a very low price PAN1321 is well suited for units produced in all quantities, with the simple AT command set you are able to integrate PAN1321 into your application. This module follows the national and international regulations, e.g. EMC, Safety, EN300328, FCC.

FEATURES

General

- Supported Profiles: RFCOMM, SPP device A and B
- Complete Bluetooth 2.0 + EDR solution
- Ultra low power design
- Temperature from -40°C to +70°C, optional +85°C (Industrial Range)
- No external components needed
- Integrates ARM7TDMI, RAM and patchable 256k EEPROM (for device configuration data and application)
- On-module voltage regulator. External supply 2.7-3.6V
- Reference clock included
- Low power clock from internal oscillator or external low power clock

Interfaces

- 3.25 Mbaud UART
- General purpose I/Os with interrupt and wake-up capabilities
- JTAG for boundary scan and debug

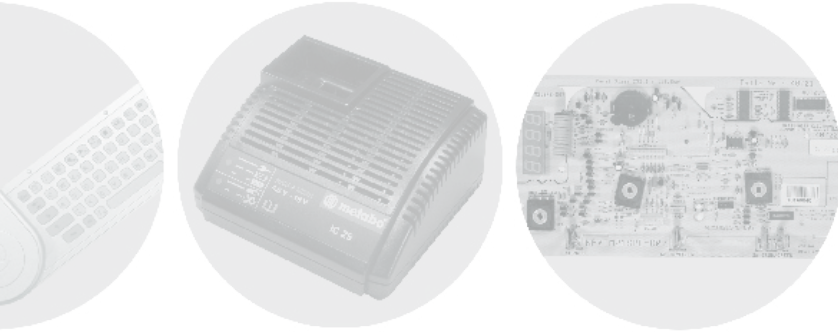
Bluetooth

- Scatternet with one slave role while still being visible
- Power control and RSSI
- Sniff mode, Adaptive Frequency Hopping and Quality of Service

ORDERING CODE

- PAN1321 with SPP and max. +70°C ENW89811J4CF
- PAN1321 with SPP and max. +85°C (on request for higher demand)

MODULES
Panasonic Electronic Devices Europe GmbH
WIRELESS



CONTACT

Hy-Line Communication GmbH

Inselkammerstr. 10
82008 Unterhaching/Munich, Germany

Tel. +49 (0)89-614503-236
Fax +49 (0)89-6140960

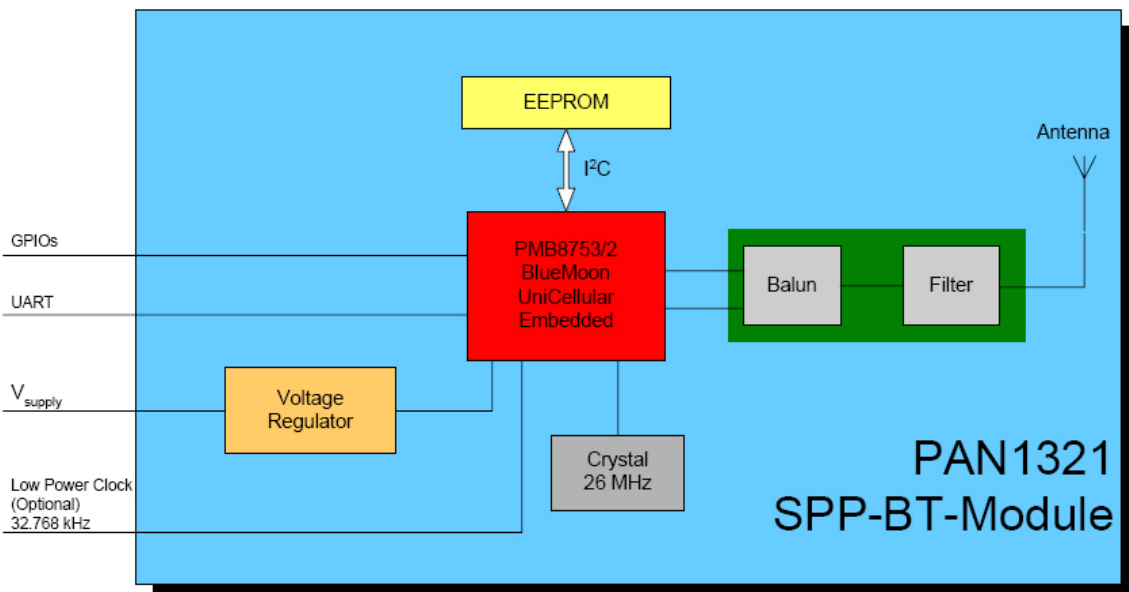
E-Mail: c-pfaff@hy-line.de
HTTP: www.hy-line.de/communication

APPLICATIONS

All Wireless Applications

- Printer Adapters and Scanners
- Printers
- Access Points
- Wireless Sensors
- Cable Replacement
- Personal Digital Assistants (PDAs)
- PC Motherboards & - Peripherals
- Industrial Applications

BLOCK DIAGRAM



TECHNICAL CHARACTERISTICS

| Parameter | Value | Condition / Note |
|--|----------------|---|
| Receiver Sensitivity (BER=10 ⁻³) | -86 dBm typ. | ideal wanted signal |
| Output Power | +3 dBm typ. | @ 50 Ohm antenna pin |
| Power Supply | 2,7 - 3,6 V | Single operation voltage |
| Ultra Low Power Mode | 80µA | T = 25°C |
| ACL (Transmit 3-DH1) | 40mA | Enhanced Data Rate, 531.2 kb/s ⁽¹⁾ |
| ACL (Receive 3-DH1) | 37mA | Enhanced Data Rate, 531.2 kb/s ⁽¹⁾ |
| Operating Temperature Range | -40°C to +70°C | optional +85°C |

(1) Figure indicates maximum possible data rate with this packet type.
Total throughput depends on application and interface setting.