### PRODUCT SPECIFICATION



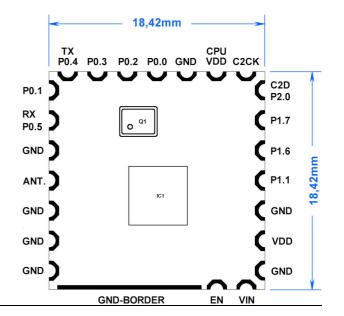


## 2.4 – 2.5 GHz Transceiver-mController-Module

# TµM2401-F330

### **Applications**

- Alarm and Security Systems
- Automotive
- Home and Building Automation
- Automatic Meter Reading (AMR)
- Wireless Handsfree
- Remote Control
- Surveillance
- Wireless Communications
- Low Power Telemetry
- Toys
- REK Remote Keyless Entry
- Industrial Monitoring and Control
- Wireless Sensor Networks
- Consumer Electronics
- Ultra Low-Power Wireless Applications



### **FEATURES**

### RF: Nordic NRF2401

- GFSK multi-channel transceiver
- 2.4 2.524 GHz ISM band
- 125 channels
- Support frequency hopping
- Data slicer / clock recovery of data
- Address and CRC computation
- DuoCeiver for simultaneus dual Receiver topology
- ShockBurst mode for ultra-low Power operation
- Low supply current TX, RX
- Data rate 0 to 1Mbps
- Output Power 1mW
- 50Ω Antenna input/output
- Differential to single ended matching network (BALUN) included

### CPU on board: Silicon Labs C8051F330

- $\bullet$  High Speed low power  $8051\mu C$  Core
- Up to 25 MIPS throughput with 25MHz Clock
- 768 Byte internal RAM
- 8K Byte FLASH, In-system programmable in 512-byte Sectors
- 9 Port USER I/O, All 5V tolerant with high sink current
- Enhanced UART, SMBus, Enhanced SPI Serial Port
- Two internal Oscillators: 24,5MHz ±2% accuracy and 80/40/20/10 KHz low frequency, low power
- Switching between clock sources on-the-fly
- Built in temperature sensor
- Comparator; programmable hysteresis and response time Configurable as interrupt or reset source
- 10-Bit current output DAC
- 10-Bit ADC, up to 200 kbps; single-ended or differential inputs
- On-chip debug; in-system debug (no emulator required)