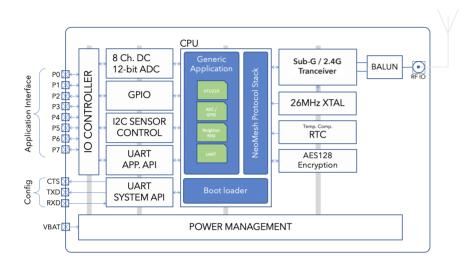
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NCxxxx NeoMesh Module Series

Ultra low power wireless mesh network module Patented NeoMesh Mesh Network Protocol Stack integrated System-in-module with direct sensor integration support Multi-band variants - 868MHz, 915MHz, 2.4GHz





LGA 11 x 18mm

KEY FEATURES:

- Ultra low system current consumption
 - Down to <20uA avg. current in active mode
 - Built-in power mgmt. for direct battery operation
- Patented NeoMesh protocol stack
 - Highly scalable architecture
 - Real time, dynamic routing in flexible topologies
- Full system in a module
 - Configurable embedded sensor-sampling app
 - UART interface for external app processor
 - Embedded radio with single ended 50 Ohm I/O

APPLICATIONS:

- Higly reliable IoT
- Wireless Sensor Networks
- Automatic Meter Reading
- Advanced Metering Infrastructure
- Mobile Ad-Hoc Networks
- Home Control & Building Automation
- Industrial Automation
- Alarm and Security Systems
- Agricultural and Forest Monitoring

NEOMESH AT A GLANCE:

- Time synchronized operation allows for industry leading current consumption for active mesh network nodes
- Full AES128 encryption combined with 32bit CRC takes reliability and security to the next level
- Distributed network intelligence, with autonomous nodes capable of operating with no central network manager
- Patented routing algorithm optimized for dynamic low power mesh network topologies
- Channel hopping ensures highest level of noise immunity and interoperability in all frequency bands
- Up to 300m node to node range combined with limitsless hop count provides for very large deployments
- All modules are pre-certified for major markets with European CE, United States FCC & Canada

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NEOMESH - A FULL END TO END ECO SYSTEM:

Pre certified modules:



NC1000-8/9:

- Two versions 868MHz (EU) & 915MHz (US)
- Up to 300 meter node to node range
- Pre certified for CE, FCC & IC



NC2400:

- 2.4GHz ISM band for world wide operation
- Up to 100 meter node to node range
- Pre certified for CE, FCC & IC

Assemblies for rapid prototyping and short time to market:



FWNCxxxx Breakout boards:

- Available with all module variants
- Compatible with Adafruit Feather series of controller boards
- Stand alone breakout board for easy sensor integration



PCNCxxxx miniPClexpress boards:

- Available with all module variants
- Fits with most industrial PC's and similar
- Utilises the USB interface of the miniPCle

Evaluation platform



NCxxxx Evaluation Board

- Available with all module variants
- Eval board contains all relevant circuitry to evaluate the module
- USB interface for the Serial interface & GPIO test circuit



NCxxxx Evaluation Kit

- Available with all module variants
- Contains 5 eval boards
- USB stick with PC software for evaluation and configuration

ORDERING INFORMATION:

Part number format:

xxxxNCyyyy-y

xx: yyyy-y:

Blank: module 1000-9: 915MHz variant FW : FeatherWing Breakout Board PC : miniPCle plugin module 1000-8: 868MHz variant 2400 : 2.4GHz variant

EVB: Evaluation board EVAL: Evaluation kit

Example: PCNC1000-8 is a miniPCle module with the NC1000-8(868MHz) module

Headquarters

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For more information

Visit neocortec.com for the full product specifications, and download white papers.

NeoCortec specializes in state of the art mesh network technology. Founded in Denmark in 2008 and is marketing the products world wide through its distribution network.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

NeoCortec:

<u>EVALNC1000C-8</u> <u>EVALNC1000C-9</u> <u>EVALNC2400C</u> <u>EVBNC1000C-8</u> <u>EVBNC1000C-9</u> <u>EVBNC2400C</u> PCINC1000C-8 PCINC1000C-9 PCINC2400C