



ADAPTIVE NETWORK

SOLUTIONS

... smarter wireless connectivity

BRICK DEVELOPMENT BOARD FOR @ANY MODULES

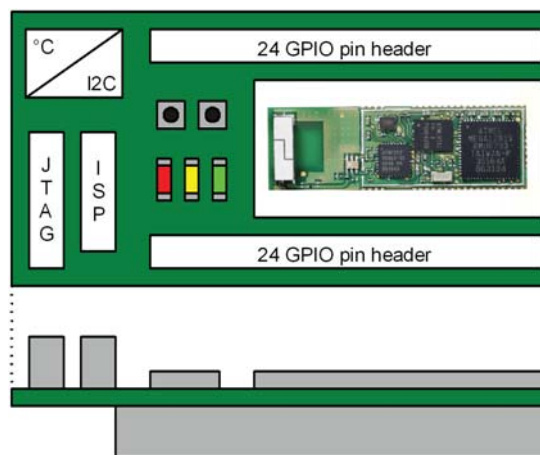
Development Board for IEEE 802.15.4/ZigBee® Wireless Mesh Networking Applications

Made in



Germany

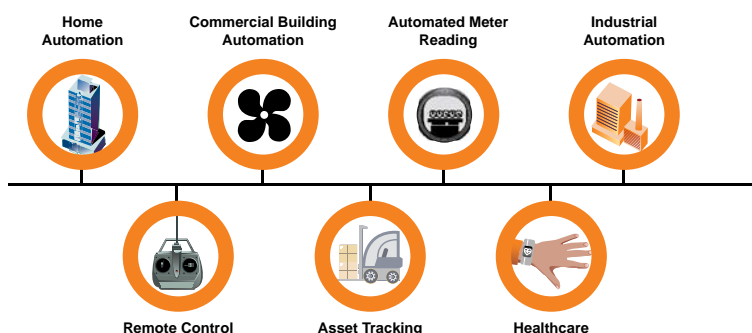
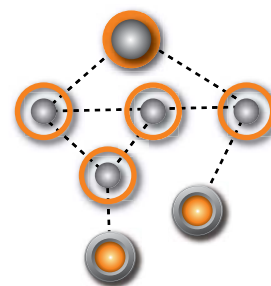
The **BRICK** Development Board is a self-contained sensor node containing @ANY 900/2400 modules and possessing their RF characteristics. The board features JTAG connector for easy on-board programming, status LED's, reset and programmable buttons, allowing to program individual functions. The BRICK board also has integrated temperature sensor for reference purposes. The board is powered by two AAA batteries or mains power supply. This versatile development board gives developers an utmost flexibility all the way to the final stages of design. BRICK's easy configuration allows running different network topologies in order to determine which suits application demands the best. It also allows seamless upgrades at a later stage. Further enhancing the flexibility during evaluation & development phases, all connections of @ANY modules are fully functional and could be easily utilized. These vital functions allow a maximum flexibility for a developer.



Embedded Software

A.N. Solutions applies the same modular approach in software, as it does in hardware. The various embedded software components are designed to interoperate seamlessly and can be easily mixed-and-matched depending on the exact needs of a client. The following @ANY software components are available:

- **@ANY Smart MAC Suite ("SMS")** offers easy control of @ANY platform's functionality via AT commands supporting all IEEE 802.15.4-based functions, as well as facilitates the addition of numerous custom features. The software suite is provided in two different versions, **SMS Base** and **SMS Pro**:
 - **@ANY SMS Base** version provides some basic functionality designed for simple network topologies and evaluation purposes. It can be used to set up Coordinator - End device (star, peer-to-peer) topologies.
 - **@ANY SMS Pro** version facilitates development of complex applications and supports additional Tree topologies with static routing, based on IEEE 802.15.4 MAC layer. This allows a large number of versatile example applications. **SMS Pro** also provides additional features like data broadcasting and full function device functionality. The data redirect feature enables users to set up tree network topologies. Finally, **SMS Pro** is designated to be a code base for customer requested extensions.
- Both version will be complemented by **@ANY SMS Monitor**, a simple, user-friendly GUI for network monitoring and application- driven extensions.
- Mesh networking topologies supporting dynamic routing schemes, based on IEEE 802.15.4 that are compliant to **ZigBee® PRO, 6LoWPAN**, as well as **Wireless HART**, can be implemented and customized on request.





General Electrical Specifications	
Supply	2 AAA batteries or 3.0 to 3.6 V external supply
Current Consumption (Rx/Tx Mode)	23 mA/50mA (AT-ANY 2400-based), 11mA/23mA (AT-ANY 900-based)
Current Consumption	< 15µA (AT-ANY 2400-based), <11µA (AT-ANY 900-based)
Temperature Sensor	
Type	LM73
Temperature Range	-40°C till 150°C
Temperature Accuracy	-10°C to 80°C: ±1.0°C (max) -25°C to 115°C: ±1.5°C (max) -40°C to 150°C: ±2.0°C (max)
Digital Resolution	11/14 bits
Physical/Environmental Characteristics	
Size	34 x 66 x 14 mm (including battery holder)
Weight	40 g (including AAA batteries)
Operating Temperature Range	-40°C to +85°C
Block Diagram	
Part Numbers	AT-ANY Brick 900-1, AT-ANY Brick 900-2 AT-ANY Brick 2400-1
Availability	In production

IMPORTANT NOTE: All data contained herewith are preliminary data only.

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