Wireless Technology to Control and Monitor Anything from Anywhere™

SYNAPSE Evaluation Kit

EK2100

Synapse's® award-winning* wireless mesh network technology is now available as a starter kit – the EK2100. Never before has the power and ease of programming your own wireless applications been easier or more affordable. The EK2100 gives you the out-of-the-box experience of an Instant-On mesh network and the full power of our RF Engine™ hardware, SNAP® network firmware, and Portal desktop software. Plug in the SNAPstick, power up the ProtoBoard, and immediately you'll get a sense of the speed and simplicity of SNAP networking. Install the Synapse Portal® software on your Windows PC (2K, XP, Vista), and experience how easy it is to program your own applications – no need to spend time and money on complex development tools and programming languages. More than just a diagnostic or commissioning tool, Portal is a complete wireless application development environment. You have everything you need to create and wirelessly prototype your embedded application.

- 30-day unconditional guarantee
- Quality backed by 1-year warranty
- SNAP – Instant-On mesh network stack
- Complete starter kit, hardware and software – device to desktop
- Everything you need to interactively prototype your application
- Portal Software – wireless application development environment
- Hands-on tutorial steps you through the basics of hardware interfacing
- Step-by-step User Guide
- Includes all required cables, power supplies, parts and connectors

*Synapse won the eg3's Spring 2008 editor's choice for its next-generation mesh wireless network products - the Synapse SNAP product line - which delivers instant-on, mesh networks with no embedded programming skills required for developing applications.

EK2100 Kit Contents:

Quantity	Part No.	Description
1	SN132HO-NR	SN132 SNAPStick USB Module
1	SN171GG-NR	SN171 ProtoBoard
2	RF100PC6	RF Engine SNAPpro F-TYPE Tx Amp
1	AC13000	9V 350ma DC Power Supply
1	AC13002	Battery Holder
2	AC13001	AA Alkaline Battery
1	AC14003	Documentation
1	SW24000	Portal CD – Unlimited Nodes
1	AC13003	Synapse Screwdriver
1	Components Pack	

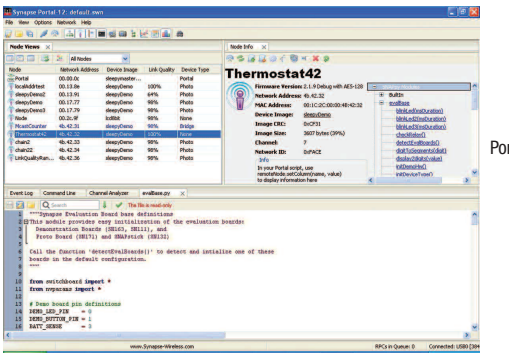
Our primary objective at Synapse is to move our customers from concept to wireless network deployment as quickly as possible. With the Synapse Network Evaluation Kit, you can experience it for yourself!

Wireless Technology to Control and Monitor Anything from Anywhere™

SYNAPSE Evaluation Kit

EK2100

The **EK2100 Evaluation Kit** is designed to guide the user through a basic SNAP network setup and a series of application demonstrations. It includes all the hardware and software needed to gain a fundamental understanding of SNAP® mesh networking and the capabilities of SNAP nodes. Included are the SNAPstick and ProtoBoard, each with an RF Engine, which will provide a network performance and evaluation platform right out-of-the box.



Portal desktop software

Hardware

SN132 SNAPstick

The compact design of the Synapse SNAPstick provides an easy way to connect a PC to a SNAP wireless network. The SNAPstick can be powered using any form of standard USB connection. The module supports all choices of the Synapse RF engines and is fully compatible with Synapse's Portal® management software.

SN171 SNAP Node ProtoBoard

With terminal blocks exposing all 19 GPIO RF Engine pins, a jumper-selectable RS232 port, LEDs, and pushbutton, the ProtoBoard is a playground for your wireless imagination. A low-power device with so much digital and analog capability that's programmable in a modern high-level scripting language makes the ProtoBoard pretty unique. Doing all this with full-mesh wireless networking is truly amazing!

RF Engines

The SNAPstick and the SNAP ProtoBoard come equipped with the amplified, internal "F" antenna, RF Engine. Synapse's amplified RF Engines are designed to transmit over greater distances and through more obstacles. Two additional RF Engine models are available from Synapse: an unamplified internal F antenna for low-cost applications, and an amplified external antenna for up to 3 miles LOS distance (all types have input amplification as standard).

Component Pack

A hands-on tutorial is included that takes you step-by-step through the basics of interfacing to the hardware. Clear pictures and instructions guide you in connecting the different resistors, LEDs, and thermistor, photo-cell and buzzer. Several, complete application examples show how the software can control and monitor the output devices, or receive input and take action on it. You can immediately begin to modify the behavior of any wireless node, and update that behavior over-the-air.

Software

Portal

The starter kit comes standard with a 6-node license for Portal, Synapse's complete wireless application development environment. This easy-to-use graphical user interface gives you access to control and monitoring functions that deliver complete network visibility and management. With Portal, you will see wireless devices graphically and control them individually or collectively, monitor activities, keep event logs, run scripts, and much more.

- Interactively control and monitor the nodes on the network
- Modify device behavior (embedded scripts) wirelessly
- Design, test, verify and deploy your application in record time

Portal includes a variety of sample applications demonstrating the power of Synapse's embedded Python engine, SNAPpy™.

SNAP – *Synapse's revolutionary wireless mesh networking firmware.*
Representing a leap-forward in embedded intelligence, SNAP is built on a foundation of peer-to-peer networking and free-form RPC calls. The result is the first system in its class supporting the capability to interactively develop custom applications using a modern, dynamic programming language.

Expand your Network

Synapse makes it easy for you to expand you network. Additional SNAP nodes can be purchased on-line from any of our distributors: Future Electronics, Digi-Key, Sager Electronics, or Carlton-Bates. Choose a SNAP node which provides a sensor input port and relay actuator to interface with the outside world. Or select additional SNAP ProtoBoards, which give you complete access to all pins of the RF Engine by your application. As soon as you power-up any SNAP Node,it immediately integrates itself into your network. The rest is up to your imagination.

SYNAPSE Wireless, Inc. 500 Discovery Drive, Huntsville, Alabama 35806
877 982-7888 · synapse-wireless.com