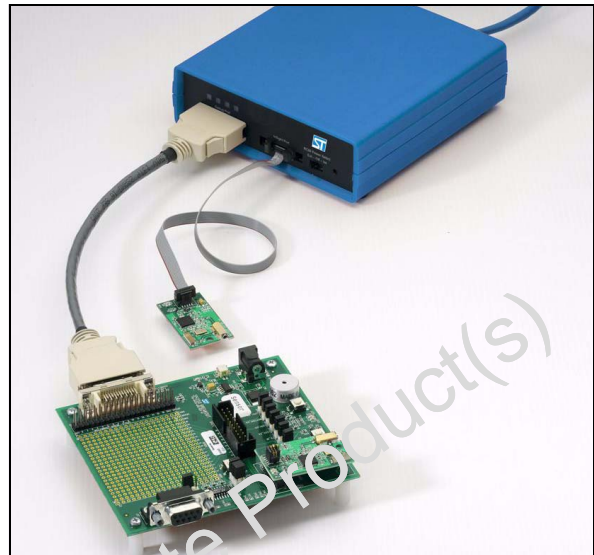# SNxxx-250, SNISDxxx
SNRCM-250, SNXIDE-250, SNINSAD-2X

Complete, full-featured tool kits for ZigBee® based networks

Data Brief

Features

■ Breakout boards with SN250 daughter board (8 with SNPRO-250, 3 with SNDEV-250)

■ Multiple InSight Adapters (8 with SNPRO-250, 3 with SNDEV-250), Ethernet switch for host PC interface

■ EmberZnet™ ZigBee® compliant networking stack

■ IDE environment with C compiler and source level debugger

■ InSight Desktop PC Development Suite for debug of wireless nodes at protocol stack API level, includes
  – Network analyzer
  – Packet sniffer
  – SN250 firmware download
  – Supports multiple nodes (SNPRO-250 - unlimited, SNDEV-250 - 3)
  – Supports multiple radio events (SNPRO-250 - unlimited, SNDEV-250 - 10,000)

■ SN250 application examples
  – Sensor/sink
  – Light/switch
  – Range test

■ Training for one person (SNPRO-250)

Description

The SNDEV-250 Development and SNPRO-250 Professional Kits from Ember are complete, full-featured tool kits that offer all the hardware and software users need for deployment of wireless networks using SN250 microcontrollers for remote monitoring, sensing, and control-network applications based on the ZigBee® standard.

Table 1.   Device summary

Reference	Part number	Description
For complete development kits		
SNxxx-250	SNPRO-250	8 SN250 nodes, PRO version of InSight Desktop
	SNDEV-250	3 SN250 nodes, DEV version of InSight Desktop
For kit components		
SNINSAD-2X	SNINSAD-2X	InSight Adapter
SNRCM-250	SNRCM250	SN250 radio daughter board
SNXIDE-250	SNXIDE-250	Single user license for xIDE
SNISDxxx	SNISDDEV	Single user license InSight Desktop Development edition, supports up to 3 nodes and 10,000 radio events
	SNISDPRO	Single user license InSight Desktop Professional edition, supports unlimited number of nodes and radio events

For further information contact your local STMicroelectronics sales office.

www.st.com

1   Description

Based on the proven tool solution for Ember's EM250 and EM260 wireless networking devices, the SN250 Development and SN250 Professional Kits provide a complete hardware/software development environment and network system (3 or 8 nodes depending on the kit ordered) that uses the SN250 and the EmberZnet™ ZigBee® advanced wireless protocol stack.

For interface between the host PC during debugging and programming, the kits include InSight Adapters (3 or 8 depending on the kit ordered) with a 10-pin Insight connection to SN250 modules and an Ethernet switch for connection of multiple adapters to a host PC.

The kits facilitate application development with sample applications and a complete software tool set that includes Ember's InSight Desktop with Network Traffic Analyzer to display network and node activity in real time, as well as the xIDE development environment with C compiler for application building and debugging. InSight Desktop is delivered in two editions:

● InSight Desktop Development (SNISDDEV) edition which is included in the SN-250 Development kits, supports up to 3 nodes and 10,000 radio events and includes a 6-month support and maintenance agreement

● InSight Desktop Professional (SNISDPRO) edition which is included in the SN-250 Professional kits, supports up an unlimited number of nodes and radio events and includes a 1-year support and maintenance agreement and a 2-day training for one person

In addition, developers using InSight Desktop Professional or the SN-250 Professional Kit benefit from Ember's hands-on ZigBee® training that includes the following topics and workshops:

● Network topologies and characteristics
● Common messaging models
● Commissioning strategies
● Application structure and stack integration
● Network efficiency
● Tool set use
● Fundamental messaging types
● Sensor network applications
● Distributed control applications
● Power management

2 Ordering information

Kits are available from STMicroelectronics (see order codes below) and ST distributors.

All tools can be bought separately as spare parts, or as part of a complete starter kit.

Table 2.   Ordering information

Order code	Description
For complete development kits	
SNPRO-250	8 SN250 nodes, PRO version of InSight Desktop with 1-year support and maintenance agreement and 2-day training
SNDEV-250	3 SN250 nodes, DEV version of InSight Desktop with 6-month support and maintenance agreement
For kit components	
SNINSAD-2X	InSight Adapter
SNRCM-250	SN250 radio daughter board
SNXIDE-250	Single user license for xIDE
SNISDDEV	Single user license InSight Desktop Development edition, supports up to 3 nodes and 10,000 radio events, 6-month support and maintenance agreement
SNISDPRO	Single user license InSight Desktop Professional edition, supports unlimited number of nodes and radio events, 1-year support and maintenance agreement and 2-day training

For more information

For additional information about STMicroelectronics' SN250 devices including datasheets, user manuals, downloads and support, as well as development kit contents and ordering, please refer to www.st.com.

For details about development kit characteristics, user documentation and tool training, please refer to www.ember.com/products_zigbee_development_tools.html.

3 Revision history

Table 3.   Document revision history

Date	Revision	Changes
14-May-2007	1	Initial release.
21-May-2007	2	Updated cover page and product number information.

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