

WP18

DUAL RADIOS ACCESS POINTS
COMPATIBLE WITH COMPEX FIRMWARE/OPEN-WRT/
REDBOOT & SNAPGEAR



- ◆ Access Point PCBA Board with 2 X miniPCI Slot
- ◆ Intel XScale IXP42x CPU
- ◆ Integrated Power Over Ethernet
- ◆ User LED, Push-Button Reset and Watch-Dog Timer feature

- Intel XScale IXP42X Processor Operating at 266MHz or 533MHz
- Default Configuration for PCBA with IXP422 (266MHz) CPU, 32MB SDRAM (Up to 128MB max.) / 4MB Flash (Up to 32MB max.)
- Default Configuration for PCBA with IXP425 (533MHz) CPU, 64MB SDRAM (Up to 128MB max.) / 8MB Flash (Up to 32MB max.)
- 2 X Type III Mini PCI Slot
- Integrated IEEE 802.3af Standard Compatible Power-over-Ethernet (PoE) Compatible with CompeX PoE Plus

TECHNICAL SPECIFICATIONS*

GENERAL INFORMATION

PROCESSOR	Intel XScale IXP42x Processor Operating at 266MHz or 533MHz
MEMORY	32MB (IXP422) / 64MB (IXP425) SDRAM (Up to 128MB max.)
FLASH	4MB (IXP422) / 8MB (IXP425) FLASH (Up to 32MB max.)
PHYSICAL PORTS	2 x Type III Mini-PCI Slots 4 x 10/100 Base-TX Ethernet Ports (with Auto MDI/MDIX) 1 x 10/100 Base-TX WAN Port 1 x RS232 Serial Port
DEBUG INTERFACE	Serial / JTAG Optional JTAG Programmer** available Optional Serial Converter*** available
OPERATING TEMPERATURE	0°C to 55°C
OTHER FEATURES	User LED and Push-button Reset Watch-Dog Timer
DIMENSIONS	166.4mm x 126mm x 1.6mm

INFORMATION ON POWER

POWER OVER ETHERNET	IEEE 802.3af Standard PoE Compatible CompeX PoE Plus Compatible
DC POWER SUPPLY	5VDC
TYPICAL OPERATING POWER (@ DC=5V)	5 W (Without MiniPCI) 10 W (With 1 X CompeX WLM54G MiniPCI and 1 X CompeX WLM54AG MiniPCI)

* Specifications are subjected to change without notice

** JTAG Programmer available to reprogram the flash in case of loader corruption.

*** Serial Converter available to change the TTL signals on board to RS232 signals for debugging



Redboot

Dualband Access Point WP18 can also be preinstalled with Redboot, which can provide a fast, efficient network aware boot loader – ideal for quickly debugging and installing your choice of embedded development system. Besides, a wide set of tools in the Redboot are available for downloading and executing programs, thus making it perfect for both product development (debug support) and for end product deployment (Flash and network booting).

For unattended or automated startup, boot scripts can be stored in Flash allowing for example loading of images from Flash or a TFTP server. WP18 provides a total development solution, integrating boot scripts so as to run Snapgear, a development system automatically at startup.

Snapgear

SnapGear's embedded Linux distribution represents state-of-the-art embedded Linux technology on our WP18, IXP-based DualBand Wireless Access Point. We provide the tool chains (ARM Linux Tools) and modified Snapgear Distribution in Source Codes. The tool chains and the modified Snapgear distribution have been debugged for use in the WP18. With that debugged version, you can immediately start to use our Redboot loader with Snapgear embedded Linux distribution and add applications to WP18.

To simplify integration with your applications, we have debugged Open-Source Madwifi-ng for use in the Snapgear. Thus our WP18 in Redboot and Snapgear supports Atheros AR5212/AR5213/AR2413/AR2414/AR 5413 /AR5414. Compex miniPCIs are also available together with the boards upon request.

Source codes are available at http://compex.com.sg/home/OEM/Redboot_Snapgear.htm



OpenWRT is an Open-Source Linux distribution. Instead of trying to cram every possible feature into one firmware, OpenWRT provides only a minimal firmware with support for add-on packages. For users this means the ability to custom tune features, removing unwanted packages to make room for other packages and for developers this means being able to focus on packages without having to test and release an entire firmware.

OpenWRT on WP18 is already debugged, which means the user can focus more on installing packages and customize features on WP18. OpenWRT on WP18 can also support Atheros-based miniPCI (AR2413/AR2414/AR5413/AR5414) as Open-Source Madwifi drivers have been integrated.

Source Codes (2.6 Kernel) - http://compex.com.sg/home/OEM/Open_wrt.htm

Ordering Options - Standard Configurations***

ORDER CODE	CONTENTS
P-S4 OEMWP181A P-S4 OEMWP186A (For RoHS)	<ul style="list-style-type: none">• WP18 IXP422 (266MHz CPU) Bare-board (Pre-loaded with Compex Firmware)• Bareboard embedded with 32MB SDRAM / 4MB Flash
P-S4 OEMWP183B P-S4 OEMWP186B (For RoHS)	<ul style="list-style-type: none">• WP18 IXP425 (533MHz CPU) Bare-board (Pre-loaded with Compex Firmware)• Bareboard embedded with 64MB SDRAM / 8MB Flash
WP18 3B DEV KIT WP18 6B DEV KIT (For RoHS on WP18 Bareboard)	<ul style="list-style-type: none">• WP18 IXP425 (533MHz CPU) Bare-board (Pre-loaded with Compex Firmware)• Bareboard embedded with 64MB SDRAM/8MB Flash• Wireless G mini-PCI (Compex WLM54G)• Wireless AG mini-PCI (Compex WLM54AG)• PoE+ Injector (Compex PoE+1A4815)• JTAG Programmer (Cable from PC to JTAG Programmer included)• Serial Converter (Cable from PC to Serial Converter included)• 5V DC Adapter

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