



WildPass

WildPass (ADM8668/X)
Wireless Network Bridging SoC

WildPass is a highly integrated SoC which incorporates a powerful 200MHz CPU with RTOS MMU support, a 802.11b/g MAC/Baseband, two 802.3 MACs and one 10/100BASE-Tx 802.3u compliant Auto-MDIX transceiver. A hardware NAT for high speed broadband applications is supported and multiple interfaces, including a USB2.0, PCI 2.3, IDE, SPI and PCM give the WildPass ultimate design flexibility.

WildPass implements the IEEE 802.11b/g MAC/Baseband for the 2.4GHz band. WildPass is interfaced with Infineon's Samurai switch controller, through its MII port, to provide extra LAN ports for broadband router applications. Wireless security functions, which are specified in the 802.11i standard, and that are fully compliant to WPA and WPA2 certification are employed. Encryption / decryption hardware engines such as AES/CCMP, TKIP/MIC and WEP are built into the data path to relieve pressure on the CPU and reduce internal AHB bus traffic. WildPass also supports 802.11e wireless QoS.

The ADM8668X is the environmentally friendly 'green' package version. This is in compliance with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Applications

- Wireless AP
- Home router
- Wireless NAS
- Wireless storage router
- Printer server
- Embedded applications

Features

- CPU: 200MHz MIPS4KC with 8KB I-cache, 8KB D-Cache with MMU support.
- CPU: AHB: SDRAM = 200MHz: 100MHz: 100MHz
- 6 DMA engines for direct memory access:

- Port1 (1 wired 10/100 MAC + 10/100 PHY with Hardware NAT support.)
- Port2 (1 wired 10/100 MAC + reverse-MII interface with Hardware NAT support.)
- WLAN (1 802.11b/g WMAC + BBP)
- 1 USB 2.0 Host + PHY.
- 1 PCI bridge can support 3 PCI devices.
- 1 IDE
- Flexible external memory support:
 - NOR FLASH up to 20MB
 - NAND FLASH up to 128MB
 - SDRAM up to 256MB
 - SRAM up to 20MB
- Standards compliant:
 - IEEE 802.11b/g
 - IEEE 803.11e, WMM,
 - IEEE 802.11i, WPA, WPA2
 - IEEE 802.11d
 - IEEE 802.3u
- AHB devices: MIPS4KC, MC, port1, port2, WLAN, USB2.0 host, PCI, IDE.
- APB devices: UART, SPI, PCM.
- LEDs:
 - led_bootack ' on: power on / flash: flash boot
 - wled_LinkAck ' on: associated / flash: radio
 - led_linkact ' on: link / flash: activity for LAN1
 - led_speed ' on: 100M / off: 10M for LAN1
 - led_fdcol ' on: full duplex / flash traffic is detected for LAN1
- Debugging interface: JTAG for MIPS-multICE, trace32
- Package: 352BGA, 289BGA (excludes PCI and IDE interface)

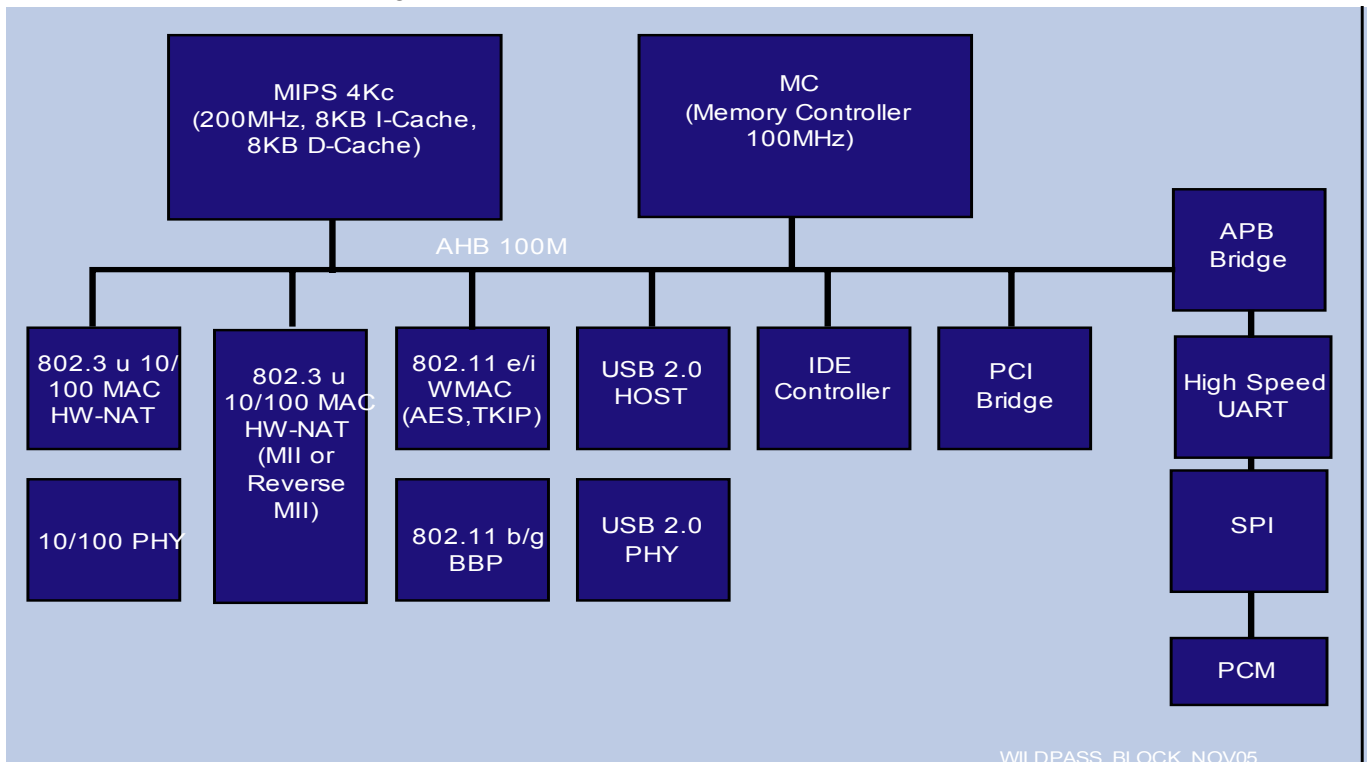
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Communications



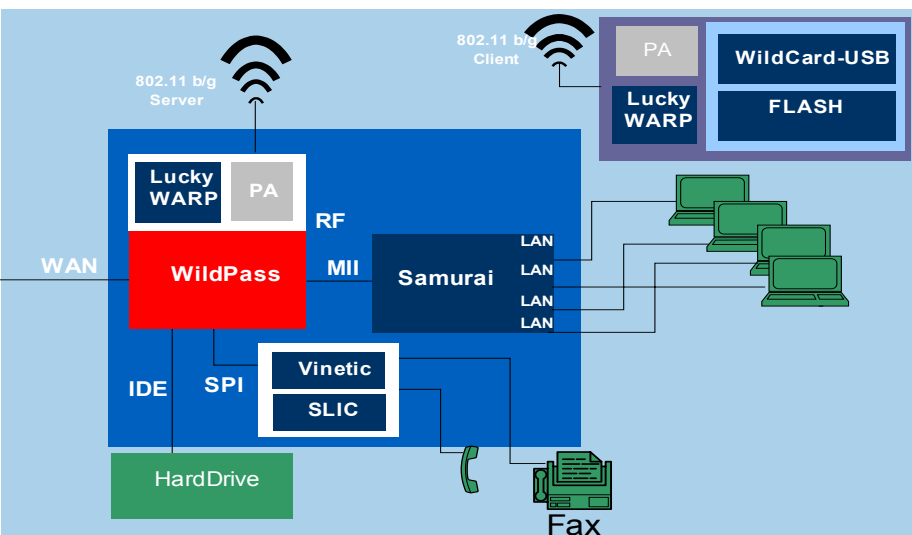
Never stop thinking

WildPass Block Diagram



WildPass Product Summary

Product	Sales Code	Description	Package
WildPass	ADM8668/X	Wireless Network Bridging SoC	BGA352 BGA289



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Application Example

How to reach us:

<http://www.infineon.com>

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