



# H&D Wireless Wi-Fi Portfolio



**CUSTOMER DIY**

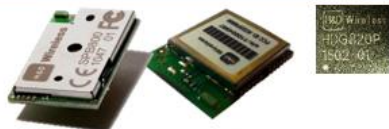
Driver on host

Tcp/IP on module

Driver on module



WiFi modems



WiFi + tcp/ip stacks

[HDG204](#) [HDG200](#)  
[HDG205](#) [HDG104](#)

[SPB800](#) [SPB820](#) [HDG820](#)

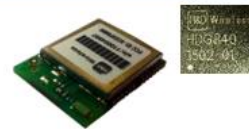
## H&D R&D Engagement

Application

Cloud connectivity

Tcp/IP on module

Driver on module



WiFi – Cloud connectivity

[SPB840](#), [HDG840](#)

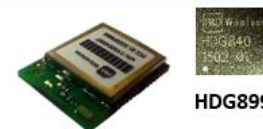
Cloud Services

Application

Cloud connectivity

Tcp/IP on module

Driver on module



WiFi- Cloud Services

[SPB899](#), [HDG899](#)





# Wi-Fi Guide



## 2015 Wi-Fi product selector for M2M, SmartHome and IoT applications 1(2)

Wi-Fi #	SPB800S/P	SPB820P	HDG820P	HDG104	HDG205	HDG200
Picture Wi-Fi products						
Status MOQ	Mass Production	Mass Production	Mass Prod. MOQ 2,5K	Mass Production	Mass Prod. MOQ 2,5K	Mass Prod. MOQ 2,5K
WLAN 802.11, Category	b/g + On board IP stack	b/g/n + On board IP stack	b/g/n + On board IP stack	b/g	b/g/n	b/g/n
Description	SMD WiFi board + integrated tcp/ip stack and full serial port application. Or API Pico mode	SMD WiFi board + integrated tcp/ip stack . API Pico mode	WiFi SiP 802.11 b/g/n +integrated tcp/ip stack . API Pico mode	WiFi SiP 802.11 b/g component in 44-pin QFN,	WiFi SiP 802.11 b/g/n component in 44-pin QFN For embedded, STM32 cortex	WiFi SiP 802.11 b/g/n component in 44-pin QFN,. For Linux systems
Wireless config. softAP	Yes	Yes	Yes	Yes*	Yes	Yes
WPS	n/a	Yes	Yes	n/a	n/a	n/a
Lowest current: Sleep current:	50nA <250uA	50nA <250uA	50nA <250uA	<15uA <30uA	<15uA <30uA	<11uA <40uA
Wi-Fi drivers. SDK:s	<a href="http://pico.hd-wireless.se">http://pico.hd-wireless.se</a>	<a href="http://pico.hd-wireless.se">http://pico.hd-wireless.se</a>	<a href="http://pico.hd-wireless.se">http://pico.hd-wireless.se</a>	Yes*	Yes*	<a href="http://linux.hd-wireless.se">http://linux.hd-wireless.se</a>
Size	34x22x5mm	26x21x3,5mm	8x8x1,2mm	7,5x7,5x1,4mm	8x8x1,2mm	8x8x1,2mm
Certifications	FCC/CE/IC	FCC/CE/IC	Pre FCC/CE/IC	Pre FCC/CE/IC	Pre FCC/CE/IC	Pre FCC/CE/IC
Interfaces	UART	UART/SPI	UART/SPI	SDIO/SPI	SDIO/SPI	SDIO/SPI
EVK / design kits	HDA800	HDA820	HDA820	SPB104	SPB205	SPB200



- Wi-Fi Modules & SiP:s**
- ✓ High level of Integration
  - ✓ FCC, CE Certified
  - ✓ Reference design
  - ✓ APP and Cloud ready



\* Included in H&D Wireless software suite for supported and selected host MCU platforms. [www.hd-wireless.se](http://www.hd-wireless.se) / products/ Software & tools. \*\* Supported on Freescale Tower platform EVK.

## Wi-Fi product selector for M2M, SmartHome and IoT applications 2(2)

Wi-Fi #	SPB104	SPB205	SPB200	HDA800	HDA820
Picture EVK:s / Design vehicles					
Status	Stocked	Stocked	Stocked	Stocked	Stocked
WLAN 802.11, Category	b/g	b/g/n	b/g/n	b/g + On board IP stack	b/g/n + On board IP stack
Description	Design vehicle , SD card, HDG104 Wi-Fi SIP on board.	Design vehicle , SD card HDG205 Wi-Fi SIP on board, embedded, STM32 cortex	Design vehicle , SD card HDG200 Wi-Fi SIP on board, Linux	EVK for the SPB800 WLAN Module solution	EVK for the SPB820P WLAN Module HDG820P SiP solution
Wi-Fi drivers. SDK:s *	<p>The H&amp;D Wireless software* implements the full IEEE 802.11 wireless LAN MAC protocol as well as a platform independent WiFi Software SDK (oWL ©)</p>	<p>The H&amp;D Wireless software* implements the full IEEE 802.11 wireless LAN MAC protocol as well as a platform independent WiFi Software SDK (oWL ©)</p>	<p><a href="http://linux.hd-wireless.se">http://linux.hd-wireless.se</a></p> <p><b>Linux Reference driver, generic library</b></p>	<p><a href="http://pico.hd-wireless.se">http://pico.hd-wireless.se</a></p> <p>The oWL Pico API and reference design is designed to be compiled and executed on multiple platforms.</p>	<p><a href="http://pico.hd-wireless.se">http://pico.hd-wireless.se</a></p> <p>The oWL Pico API and reference design is designed to be compiled and executed on multiple platforms.</p>



SPB820P Wi-Fi module



HDG820P Ref. design



HDG820P Wi-Fi SiP 8x8mm



Owl Pico API



Owl API

[www.hd-wireless.se](http://www.hd-wireless.se)

[sales@hd-wireless.se](mailto:sales@hd-wireless.se)

- \* H&D Wireless provide license free (0 USD) Wi-Fi drivers , SDK:s for selected host MCU platforms. [www.hd-wireless.se /products/Software & tools](http://www.hd-wireless.se/products/Software%20&%20tools)
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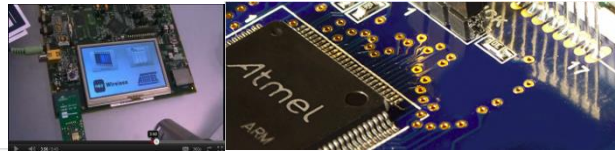
Wi-Fi product selector for M2M, SmartHome and IoT applications

Supported H&D Wi-Fi driver / Atmel ARM EVK



SAM9M10G45-EK    SAMG35-EK    SAM9M10-EKES    SAM9RL-EK    SAM9X5-EK    SAM9N12    SAM3S-EK    SAM4S-EK    SAM4S

Wi-Fi SPB104 b/g	✓	✓	✓	✓	✓	S	S	S	✓
Wi-Fi SPB204 b/g	✓	✓	✓	✓	✓	S	S	S	✓
Wi-Fi SPB200 b/g/n									✓



Supported H&D Hardware / Atmel XMEGA/AVR EVK



EVK1104    EVK1105    EVK1100    EVK1101    XMEGA-A1 Xplained

Wi-Fi SPB104 b/g	✓	✓	✓	✓	n/a
Wi-Fi SPB204 b/g	✓	✓	✓	✓	n/a
Wi-Fi SPB105 b/g	✓	✓	n/a	n/a	n/a
Wi-Fi SPB800E b/g + TCP/IP	n/a	n/a	n/a	n/a	✓
H&D Web server ref design	✓	✓	✓	✓	✓



## Wi-Fi Modules, SiP:s, EVK

- Supported on Leading Micro-controller Platforms for quick design turnaround
- Lowest Power Consumption
- High Level of Integration
- High System Performance



## CONTACT

[sales@hd-wireless.se](mailto:sales@hd-wireless.se)  
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**Cortex**  
Intelligent Processors by ARM\*

# Wi-Fi Guide






Wi-Fi product selector for M2M, SmartHome and IoT applications

<p>STM32F4</p>  	<p>STM32F1</p>  	<p>SPB204 with uSD adapter</p>  	<p>SPB204 Wi-Fi SD EVK</p>  
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## Wi-Fi Modules, SiP:s, EVK

- Supported on Leading Micro-controller Platforms for quick design turnaround
- Lowest Power Consumption
- High Level of Integration
- High System Performance



Wi-Fi / Supported host architectures	STM32F1	STM32F2	STM32F4
<p>SPB104 Wi-Fi</p> 	✓ OK	✓ OK	✓ OK
<p>SPB204 Wi-Fi b/g</p> 	✓ OK	✓ OK	✓ OK
<p>SPB205 Wi-Fi b/g/n</p> 			✓ OK

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