



H&D Wireless Connectivity Guide 2022-2023

A Selector Guide for IoT, Industry 4.0 and Digital Media market

www.hd-wireless.com/products/connectivity-modules/

Support & Documentation: support.hd-wireless.com



Summary: H&D Wireless Connectivity Guide 2022-2023



Module part#	SPB620	SPB437	SPB611	SPB209	SPB438
Data rates	Up to 1.6 Gbps	Up to 1.6 Gbps	Up to 600Mbps	Up to 433 Mbps	Up to 600Mbps
Wi-Fi	802.11ax/ac/a/b/g/n 2.4 and 5GHz 2x2 MU-MIMO	802.11ax/ac/a/b/g/n 2.4 and 5GHz 2x2 MU-MIMO	802.11ax/ac/a/b/g/n 2.4 and 5GHz 1x1 MU-MIMO	a/b/g/n/ac 2.4 and 5GHz Bluetooth 4.2 Classic and BLE	802.11ax/ac/a/b/g/n 2.4 and 5GHz 1x1 MU-MIMO
Bluetooth	Bluetooth 5.3	Bluetooth 5.3	Bluetooth 5	yes	Bluetooth 5
Dual band	yes	yes	yes	yes	yes
Dual mode	yes	yes	yes	yes	yes
Format	16x20mm, external antenna	M.2 2230 MODULE, 22x30mm	14x14mm, 14x21mm w. external ant.	14x14mm, 14x21 LTE filter	M.2 2230 MODULE, 22x30mm
Operating Temp	Industrial: -40 to +85 °C	Industrial: -40 to +85 °C	Industrial: -40 to +85 °C	Industrial: -40 to +85 °C	Industrial: -40 to +85 °C
I/F	PCIe, 4-bit SDIO 3.0, HS-UART,	PCIe, 4-bit SDIO 3.0, HS-UART,	4-bit SDIO 3.0, HS-UART,	SDIO 3.0, HS UART, PCM	4-bit SDIO 3.0, HS-UART,
EVK	HDA620	HDA437	HDA611	HDA209	HDA438 incl antennas
Samples available	June/2022	June/2022	Q4/2022	Yes	Q4/2022



Module part#	SPB228	SPB432	HDG229
Data rates	Up to 800Mbps	Up to 800Mbps	Up to 150Mbps
Wi-Fi	802.11 a/b/g/n/ac 2.4 and 5GHz 2x2 Wave2 MU-MIMO	802.11 a/b/g/n/ac 2.4 and 5GHz 2x2 Wave2 MU-MIMO	802.11 a/b/g/n/ 2.4 and 5GHz Bluetooth 5 Classic and BLE
Bluetooth	Bluetooth 5 Classic and BLE	Bluetooth 5 Classic and BLE	yes
Dual band	yes	yes	yes
Dual mode	yes	yes	8x8mm with integrated shield
Format	Industrial: -40 to +85 °C	Industrial: -40 to +85 °C	Industrial: -40 to +85 °C
Operating Temp	M.2 12x16mm solder down standard	M.2 2230 MODULE, 22x30mm	SDIO 3.0, UART, PCM
I/F	PCIe 3.0, USB 3.0, SDIO 3.0, UART, PCI	PCIe, SDIO and USB Interfaces	HDA229
EVK	HDA228	HDA228	MOQ: 100K
Samples available	Yes	Yes	contact sales@hd-wireless.se

Welcome to support.hd-wireless.com

This website aims to provide technical information about how to work with the H&D Wireless Wi-Fi and Bluetooth modules on Linux and Android based platforms. You will be able to find here all the documentation we provide for our different modules including datasheet, schematics and application notes together with the Linux drivers. Already have one of our evaluation boards? Check out our [getting started guides](#) to get it quickly up and running.



For order options and data sheets please contact: sales@hd-wireless.se and visit www.hd-wireless.com



SPB620



SPB620 WiFi6 2x2 concurrent dual Wi-Fi module

Module	SPB620
Data rates	Up to 1.6 Gbps
Wi-Fi	802.11ax/ac/a/b/g/n 2.4 and 5GHz 2x2 MU-MIMO
Bluetooth	Bluetooth 5.3
Dual band	yes
Dual mode	yes
Format	16x20mm, external antenna
Operating Temp	Industrial: -40 to +85 °C
I/F	PCIe, 4-bit SDIO 3.0, HS-UART,
EVK	HDA620
Samples available	June/2022

SPB437



SPB437 WiFi6 2x2 concurrent dual Wi-Fi module

Module	SPB437
Data rates	Up to 1.6 Gbps
Wi-Fi	802.11ax/ac/a/b/g/n 2.4 and 5GHz 2x2 MU-MIMO
Bluetooth	Bluetooth 5.3
Dual band	yes
Dual mode	yes
Format	M.2 2230 MODULE, 22x30mm
Operating Temp	Industrial: -40 to +85 °C
I/F	PCIe, 4-bit SDIO 3.0, HS-UART,
EVK	HDA437
Samples available	June/2022

For order options and data sheets please contact: sales@hd-wireless.se and visit support.hd-wireless.com

SPB611



SPB611 WiFi6 1x1 module / PCIe, SDIO Interface

Module	SPB611
Data rates	Up to 600Mbps
Wi-Fi	802.11ax/ac/a/b/g/n 2.4 and 5GHz 1x1 MU-MIMO
Bluetooth	Bluetooth 5
Dual band	yes
Dual mode	yes
Format	14x14mm, 14x21mm w. external antenna
Operating Temp	Industrial: -40 to +85 °C
I/F	PCIe, 4-bit SDIO 3.0, HS-UART,
EVK	HDA611
Samples available	Q4/2022

SPB209



SPB209 WiFi5 1x1 module / SDIO Interface

Module	SPB209
Data rates	Up to 433 Mbps
Wi-Fi	a/b/g/n/ac 2.4 and 5GHz
Bluetooth	Bluetooth 4.2 Classic and BLE
Dual band	yes
Dual mode	yes
Format	14x14mm, 14x21mm w external antenna
Options	LTE filter, with antenna
Operating Temp	Industrial: -40 to +85 °C
I/F	SDIO 3.0, HS UART, PCM
EVK	HDA209
Mass production	Yes

For order options and data sheets please contact: sales@hd-wireless.se and visit support.hd-wireless.com

SPB438



SPB438 WiFi6 1x1 module / PCIe, SDIO Interface

Module	SPB438
Data rates	Up to 600Mbps
Wi-Fi	802.11ax/ac/a/b/g/n 2.4 and 5GHz 1x1 MU-MIMO
Bluetooth	Bluetooth 5
Dual band	yes
Dual mode	yes
Format	M.2 2230 Module 22x30mm
Operating Temp	Industrial: -40 to +85 °C
I/F	PCIe, 4-bit SDIO 3.0, HS-UART,
EVK	HDA438 incl antennas
Samples available	Q4/2022

For order options and data sheets please contact: sales@hd-wireless.se and visit support.hd-wireless.com



SPB228



SPB228 WiFi5 2x2 module / PCIe / SDIO / USB Interface

Module	SPB228
Data rates	Up to 800Mbps
Wi-Fi	802.11 a/b/g/n/ac 2.4 and 5GHz 2x2 Wave2 MU-MIMO
Bluetooth	Bluetooth 5 Classic and BLE
Dual band	yes
Dual mode	yes
Operating Temp	Industrial: -40 to +85 °C
Format	M.2 12x16mm solder down standard pinning format
I/F	PCIe 3.0, USB 3.0, SDIO 3.0, UART, PCM
EVK	HDA228
Mass production	Yes

SPB432



SPB432 WiFi5 2x2 M.2 card / PCIe / SDIO / USB Interface

Module	SPB432
Data rates	Up to 800Mbps
Wi-Fi	802.11 a/b/g/n/ac 2.4 and 5GHz 2x2 Wave2 MU-MIMO
Bluetooth	Bluetooth 5 Classic and BLE
Dual band	yes
Dual mode	yes
Operating Temp	Industrial: -40 to +85 °C
Format	M.2 2230 MODULE, 22x30mm
I/F	PCIe, SDIO and USB Interfaces
EVK	HDA228
Mass production	Yes

For order options and data sheets please contact: sales@hd-wireless.se and visit support.hd-wireless.com

HDG229



HDG229 WiFi4 1x1 SIP, MOQ: 100K

Module	HDG229
Data rates	Up to 150Mbps
Wi-Fi	802.11 a/b/g/n/ 2.4 and 5GHz
Bluetooth	Bluetooth 5 Classic and BLE
Dual band	yes
Dual mode	yes
Format	8x8mm with integrated shield
Operating Temp	Industrial: -40 to +85 °C
I/F	SDIO 3.0, UART, PCM
EVK	HDA229
Availability	MP ramp up on short notice possible, MOQ : 100K (contact sales@hd-wireless.se)

For order options and data sheets please contact: sales@hd-wireless.se and visit support.hd-wireless.com

