

# NEW HARDWARE RELEASE

## OVERVIEW

After almost 5 years in production, the first 64drive is being retired – and a new hardware version is now out to take its place. Several new features build on the philosophy that created the original – minimal design shortcuts and attention to detail.

## FEATURE MATRIX

	64drive HW2	64drive HW1
Compatibility	100%	99.8% (100% with 6105)
Cartridge RAM	256MB DDR2	64MB SDRAM
Lockout Chip	Auto-region, emulate 100% of all known CIC types	6102/6105 fixed region
USB Interface	20+MB/sec USB 2.0 Micro-B	8MB/sec USB 2.0 Mini-B
Memory Cards	microSD	microSD, CompactFlash
Save Chip Emulation	100%, realtime flushed to SD	100%, realtime flushed to card
Real-time Clock	Yes	No
Wi-Fi (802.11b/g/n)	Yes	No
Multipurpose Button	Yes	No

## FEATURE EXPLANATION

1. New custom CIC chip.  
Automatic region support – 64drive now works in all Nintendo 64s regardless of lockout region. No manual switching is required.  
No patches required to run any known software in existence. Also, any CIC ever produced can be emulated in USB mode allowing full compatibility with physical Gamesharks.
2. More SDRAM – now 256MB which is four times larger than the largest known title. This extra RAM will be key in enabling true 64DD support.
3. Faster USB interface – 20MB/sec with up to 35MB/sec in the future. The USB interface is entirely hardware DMA driven and runs independently of any N64 software in both HW1 and HW2.
4. Battery-backed real-time clock – will allow true 64DD support along with Doubutsu no Mori.
5. Wireless LAN support via ESP8266 chipset – supports both client and access point mode via serial UART. Built-in TCP/IP and UDP stacks, upgradeable via software.
6. Push button is exposed on the cartridge back – usable for future Gameshark emulation (GS button) or memory mapped for use by homebrew.

## IMPLICATIONS

1. New hardware HW2 is compatible with any application using existing 64drive features.
2. All software (menu, firmware, bootloader) will continue to be developed and any new features where applicable will be backported to the old HW1.
3. Support for physical HW1 units in the field continues.