

Link do produktu: <https://www.nobshop.pl/stack-hdzero-halo-fc-h7-esc-am32-70a-icm42688-p-4977.html>



Stack HDZero Halo FC H7 & ESC AM32 70A ICM42688

| | |
|----------------|------------------|
| Cena brutto | 565,00 zł |
| Cena netto | 459,35 zł |
| Dostępność | Dostępny |
| Czas wysyłki | 1 - 3 dni |
| Kod producenta | HDZ5581A |
| Producent | HDZero |

Opis produktu

Stack HDZero Halo FC H7 & ESC AM32 70A ICM42688

The **HDZero Halo Stack** combines the **Halo Flight Controller** and **Halo 4in1 70A ESC** into a race-ready powertrain, engineered by HDZero—leaders in high-performance digital FPV systems. Designed for power, reliability, and ease of assembly, this stack is the ultimate solution for competitive racing and freestyle pilots.

With its clean layout, minimal wiring, and integrated components, the HDZero Halo Stack is the easiest way to build a professional-grade racing drone—without sacrificing performance, reliability, or serviceability.

At its core is the **Halo 4in1 70A ESC**, built for extreme durability and responsive throttle. A **split-board design** separates control and power stages, improving thermal performance and crash resilience. With **24 MOSFETs** across an **8-layer PCB** using **3oz copper per layer** and a rear-mounted **copper bar**, the Halo ESC delivers exceptional burst throttle response with minimal voltage drop. Rated for **70A continuous per motor** and **100A bursts**, the ESC supplies clean, stable power while protecting sensitive electronics from voltage spikes. A **conformal coating** adds moisture, dust, and corrosion resistance. Choose between **BLHeli32** or **AM32** firmware based on your preference.

The **Halo Flight Controller** simplifies your build while delivering professional-grade control. Powered by an **H7 processor**, it integrates a **Gemini true diversity ELRS receiver**, using dual independent receivers for rock-solid control link stability. A **TXCO (temperature-compensated crystal oscillator)** maintains consistent ELRS performance even in extreme temperatures—essential for race conditions.

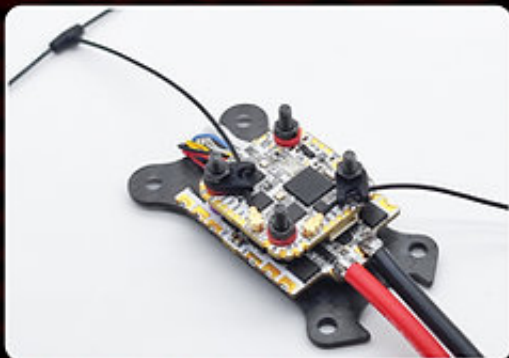
The **integrated ELRS RX** not only simplifies quad assembly but also provides a cost-effective solution. With the Gemini ELRS RX typically priced at \$25, this combination represents significant savings compared to purchasing separate ELRS receivers and flight controllers.

Built for digital video systems, the Halo **eliminates the analog OSD chip to reduce costs and save space**. It is

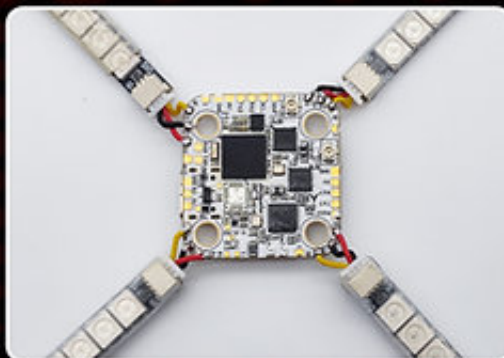
specifically designed to allow the HDZero Race v3 VTX to stack on top of it in a low-profile manner, resulting in a durable and compact stack height. This optimization ensures a secure, space-efficient build while maintaining excellent performance.

The **Halo FC** requires **no soldering** for VTX, receiver, or ESC connections. Everything plugs directly into dedicated sockets using included cables, making assembly and field repairs fast and frustration-free. This low-profile, modular design results in a tidy, durable racing stack.

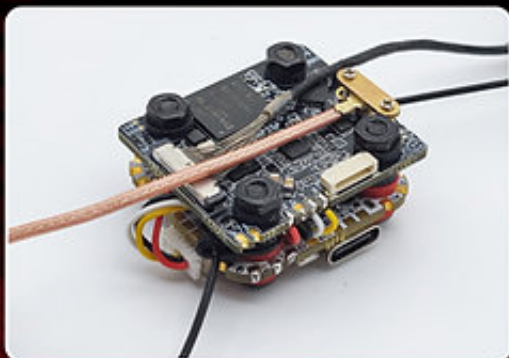
Plug & Play!



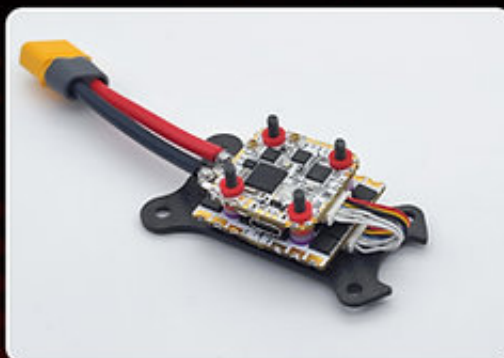
Antenna Retainers



LED Strip



Easy FC/VTX Connection



Solder Free ESC/FC Connection

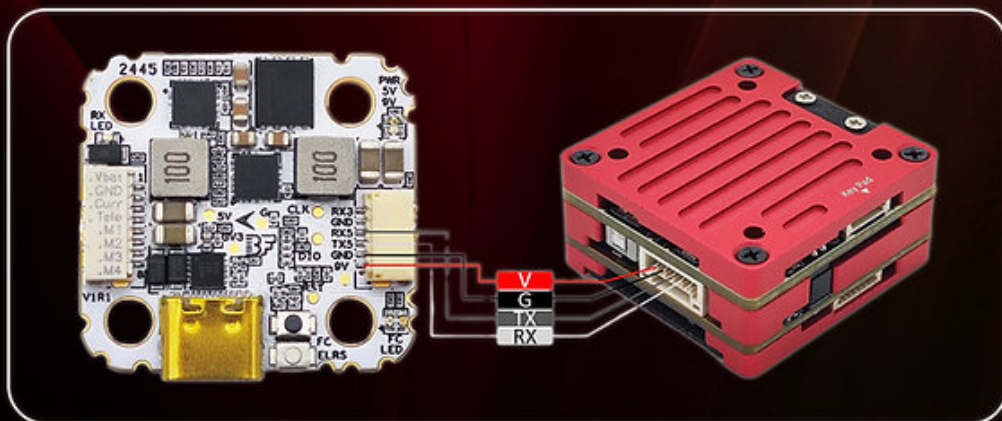


No more RX wiring

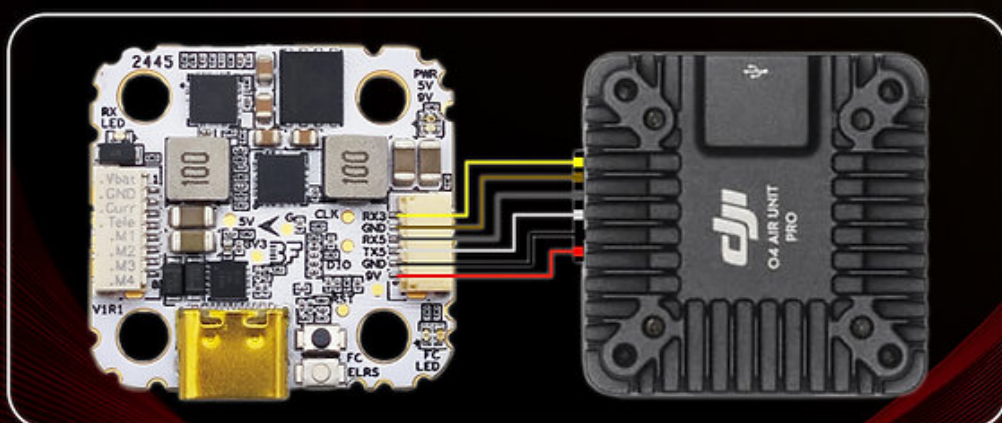


HDZero Family!

For Freestyle Pilots



HDZero Freestyle V2 VTX Wiring



DJI O4/03 Wiring

The **switchable 9V BEC** powers your HDZero VTX, with remote control over power via Betaflight to simplify pit stops and extend VTX lifespan. A separate **5V/4A BEC** is capable of powering an entire competition-grade LED setup without the need for external regulators.

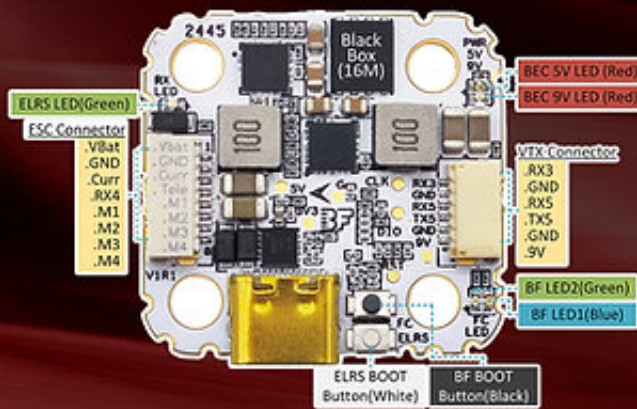
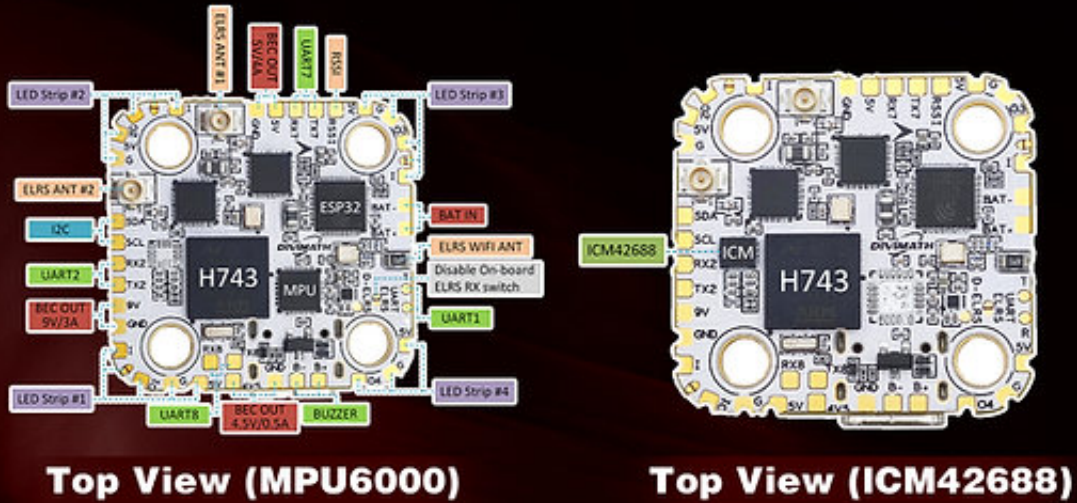
The Halo Flight Controller is available in two versions, MPU6000 and ICM42688, to meet different pilot preferences.

Halo Flight Controller

- Plug-and-play HDZero race build - no soldering required for RX, VTX, or ESC connections
- Integrated Gemini true diversity ELRS receiver for superior control link stability
- TXCO-enhanced ELRS performance in high-heat race environments
- H7 processor for fast, responsive control
- Dedicated switchable **9V/3A BEC** to power HDZero VTX, controlled via Betaflight
- Powerful **5V/4A BEC** supports full competition LED kits
- Optimized for low-profile stacking with HDZero VTX

- ICM42688 gyro
- Betaflight firmware (HDZERO_HALO target)

Halo FC Features



Bottom View



H743 MCU Running at 480MHz



Gemini 2.4GHz ELRS RX



Dual BECs



Flexible LED Strip Connection



Solder Free

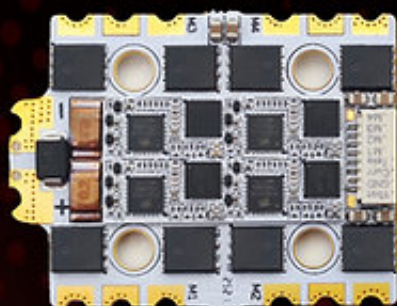
Halo 4in1 70A ESC

- Split-board architecture with copper bus bar for optimized burst throttle response
- 8-layer PCB with 3oz copper per layer and 24 MOSFETs

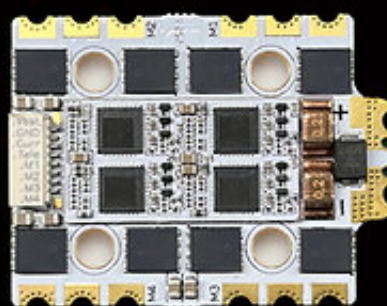
- Continuous 70A per motor / 100A burst (3 seconds)
- Exceptionally clean power delivery protects flight controller from voltage spikes
- Conformal coating for moisture, dust, and corrosion protection
- Dual-sided motor solder pads for flexible builds
- Firmware: AM32
- Telemetry support
- Supports 3S to 8S batteries (9V-40V input)

70A x 4

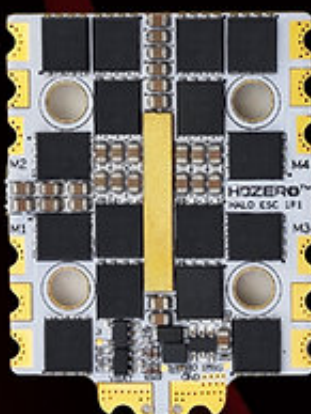
Halo ESC Features








Top View (AM32)



Top View (BLHeli32)



Bottom View

-  Rock-solid reliability and impact resistance
-  Split-board designed to withstand massive voltage spikes
-  8-layer PCB with over 3 oz of copper for robust conductivity
-  Enhanced current handling and efficient thermal dissipation
-  70A×4 continuous / 100A×4 burst output

Includes

- 1x HDZero Halo FC
- 1x HDZero Halo ESC
- 1x ESC cable (8-pin SH1.0, 30mm)
- 1x XT60 cable (70mm,12AWG)
- 1x 35V/1000uf capacitor
- 9x Rubber grommet (4.5mm height)
- 6x Rubber grommet (6.6mm height)
- 5x Nylon washer (M3 1.0mm thick)
- 5x 304 Steel nuts (M3 2.3mm thick)
- 4x 12.9 Carbon steel screws (M3 25mm length)
- 1x ELRS T-sharp short antenna (40mm)
- 1x ELRS T-sharp long antenna (90mm)
- 2x ELRS Antenna retainers

Flight Controller

| | |
|---------------|--------------------------------------|
| CPU | STM32H743 (480MHz) |
| Gyro | ICM42688 |
| BEC output | DC 5V/4A DC 9V/3A DC 4.5V/0.5A |
| Black Box | 16MB Flash memory |
| 2C Pads | Yes |
| UART Pads | TX2/RX2, TX7/RX7, TX8/RX8 |
| ESC Telemetry | RX4 |
| VTX MSP UART | TX5/RX5 |
| DJI HDL | RX3 |
| Buzzer Pads | Yes |
| LED Strip | Parallel or Serial |
| USB | Type-C |
| Analog OSD | No |
| FC Firmware | Betaflight: HDZERO HALO |

ELRS Receiver

| | |
|-------------------|-------------------------------|
| Chip Set | ESP32 + 2x SX1280 |
| FC UART | TX1/RX1 |
| True Diversity RX | Yes |
| RF Frequency | 2.4GHz |
| Max TX RF Power | 10mW |
| Antenna Interface | 2xU.FL |
| ELRS Firmware | HDZero Halo FC 2.4G Gemini RX |

Specifications

| | |
|------------------------|--|
| Model | HDZero Halo 4in1 70A ESC |
| MCU | AT32F421 (120MHz) |
| Firmware | AM32 2.18 Target: HDZ ESC 1R0 F421 |
| Input Voltage | DC 9V - 40V (3S - 8S) |
| Telemetry | Supported |
| Input signal | Dshot 150/300/600/1200/2400, MultiShot, OneShot |
| Output Voltage | VBAT (to power the FC) |
| Max Current | Over 70Ax4 (Continuous) / 100Ax4 (Burst) |
| Current Sensor | Scale = 170, offset = 0 |
| Dual-sided solder pads | YES |
| Dimensions | 33x43mm |
| Mounting | 20x20mm, Φ 4mm for 3mm Rubber Grommets |

Weight

13.4g
