

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	<b>565,00 zł</b>
Cena netto	<b>459,35 zł</b>
Dostępność	<b>Aktualnie niedostępny</b>
Czas wysyłki	<b>1 - 3 dni</b>
Kod producenta	<b>HDZ5581A</b>
Producent	<b>HDZero</b>

### 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.

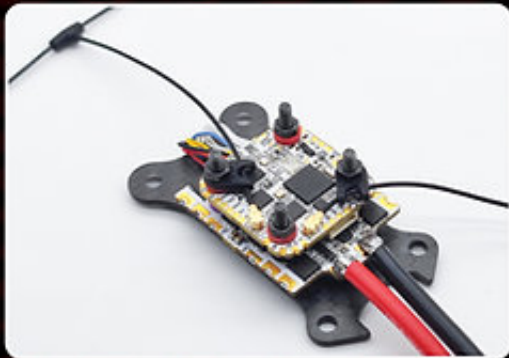
Built for digital video systems, the Halo **eliminates the analog OSD chip to reduce costs and save space**. It is

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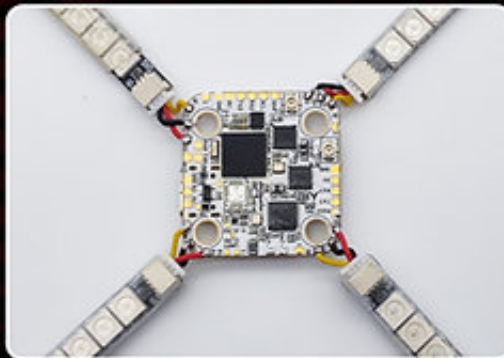
specifically designed to allow the HDZero Race v3 VTX to stack on top of it in a low-profile manner, resulting in a durable and compact stack height. This optimization ensures a secure, space-efficient build while maintaining excellent performance.

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.

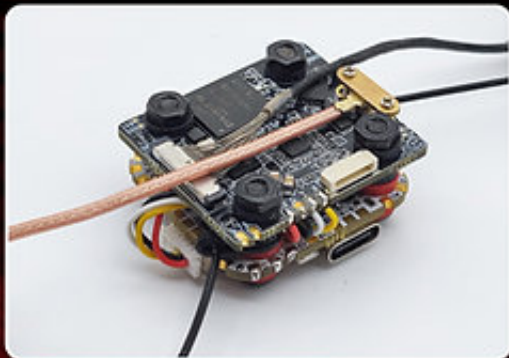
# Plug & Play!



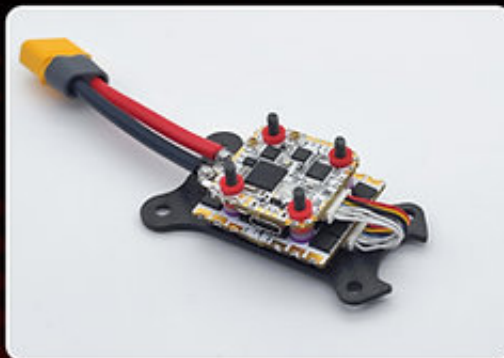
Antenna Retainers



LED Strip



Easy FC/VTX Connection



Solder Free ESC/FC Connection

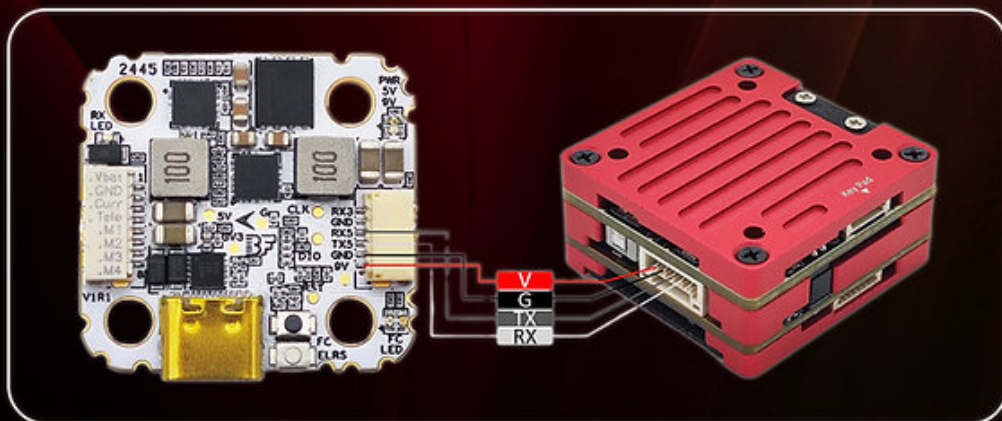


No more RX wiring

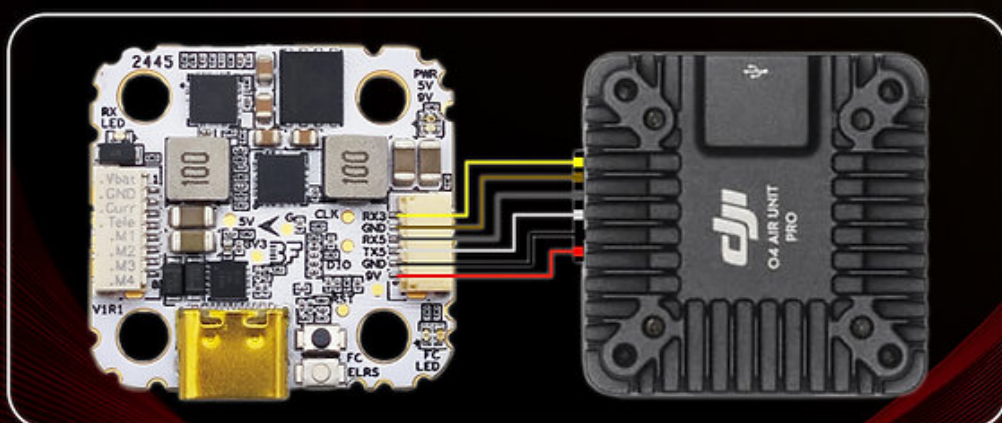


HDZero Family!

# 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.

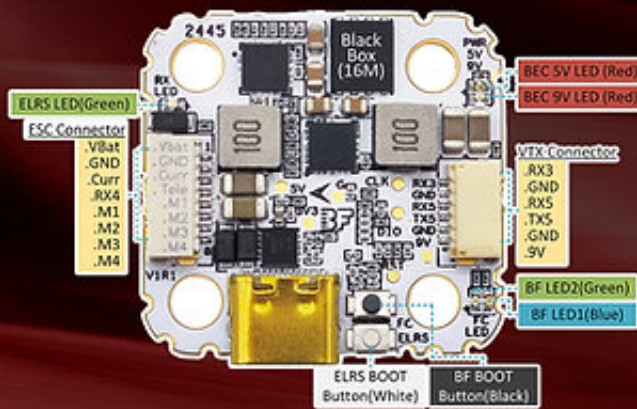
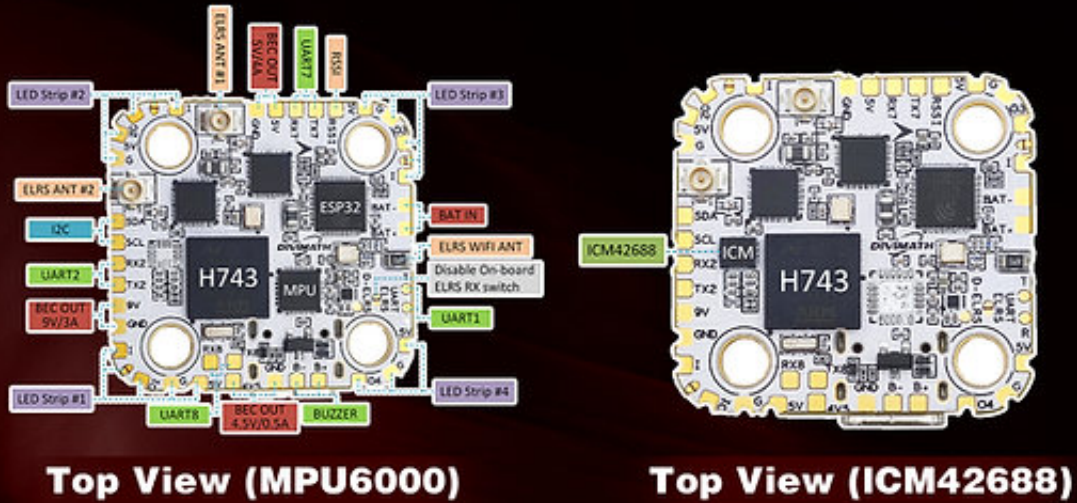
The Halo Flight Controller is available in two versions, MPU6000 and ICM42688, to meet different pilot preferences.

### 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**

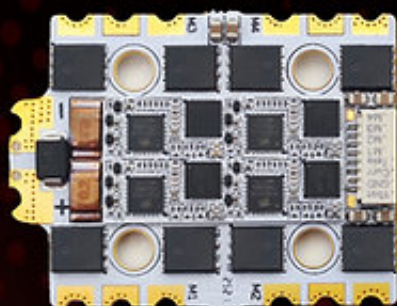
## Halo 4in1 70A ESC

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

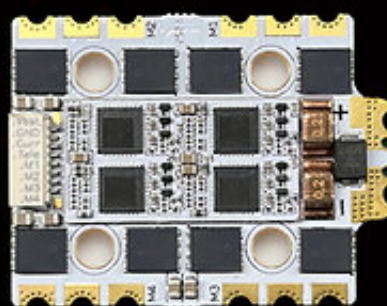
- Continuous 70A per motor / 100A burst (3 seconds)
- Exceptionally clean power delivery protects flight controller from voltage spikes
- Conformal coating for moisture, dust, and corrosion protection
- Dual-sided motor solder pads for flexible builds
- Firmware: AM32
- Telemetry support
- Supports 3S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

70A x 4

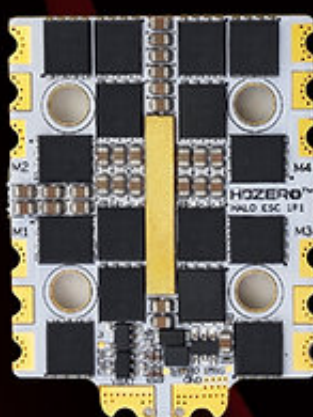
# Halo ESC Features








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	<b>ICM42688</b>
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	<b>AM32 2.18</b>  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, $\Phi$ 4mm for 3mm Rubber Grommets

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Weight

13.4g

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