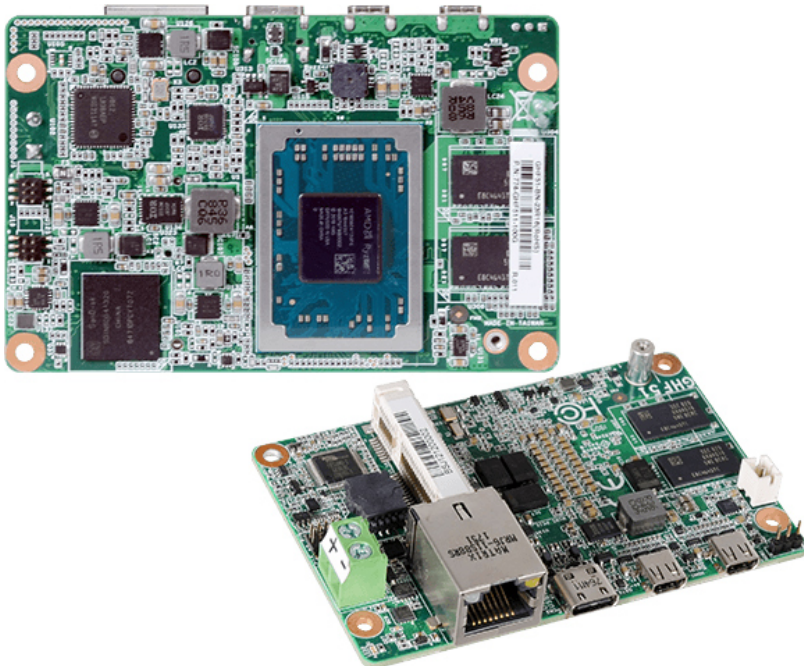


## A Credit Card-Sized AMD Ryzen Board

Written by Marco Attard  
25 March 2020

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Embedded systems specialist DFI reveals what it claims is the smallest single-board computer (SBC) using an AMD Ryzen Embedded processor-- the GHF51, a highly integrated motherboard the size of a credit card.



Unsurprisingly, the GHF51 brings to mind the Raspberry Pi micro-PC, even if it promises the capabilities of a modern PC. The 1.8-inch platform carries the AMD dual-core Ryzen Embedded R1000-series SoC, together with a Radeon Vega GPU. The GPU carries three compute units (192 stream processor), and offers built-in H.264, H.265 and VP9 decoding. Users can add 2/4/8GB of single-channel DDR4-3200 RAM and 16/32/64GB of eMMC storage to the board. Further features include a mini PCIe slot for add-in cards, an 8-pin DIO header, x2 micro HDMI 1.4 inputs, x1 USB-C port, x1 GbE connector (controlled by an Intel I211AT or I210IT chip) and an fTPM 2.0 chip.

DFI offers the GHF51 in two flavours-- the GHF51-BN-43R16 with the Ryzen Embedded R1606G APU (2.60–3.50GHz, 12W) and the GHF51-BN-43R15 with the Ryzen Embedded R1505G APU (2.40–3.30 GHz, 12W). The two boards carry 4GB DDR4-3200 RAM, 32GB eMMC storage, x2 micro HDMI outputs, x1 GbE port and x1 USB-C port.

The tiny machines support either Windows 10 64-bit IoT Enterprise and Linux. So far the company is still to announce when they will hit the market, and in fact DFI says their status currently remains "Preliminary."

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Go [DFI GHF51](#)