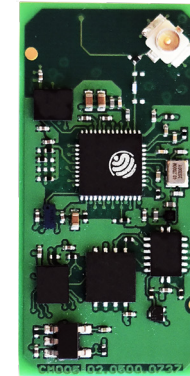


Embedded Module

Open Standard Module™ - iesy ESP32 OSM-oF

Technical Concept

- ▶ Microcontroller: ESP32 Xtensa DualCore x32 LX6
- ▶ CPU Clock Rate: 240 MHz
- ▶ RAM: 512 KB
- ▶ Flash-Memory: 32 Mbit SPI-Flash
- ▶ Dimension: 15 mm x 30 mm
- ▶ Footprint: OSM Size-0
Land Grid Array (LGA) with 188 contacts
- ▶ Supply: 3,3 V, +/- 5 % via LGA contacts
- ▶ Power consumption: <1 W (typ.)
- ▶ Temperature range:
 - > Operating: -40 °C to +80 °C
 - > Storage: -40 °C to +85 °C
- ▶ Software: Espressif IDE (FreeRTOS based) via PlatformIO
- ▶ Features & Interfaces
 - > Wi-Fi 802.11 b/g/n + Bluetooth/BLE
 - > 1 x LAN 10/100 (RMII), MAC compatible with IEEE 802.3
 - > 1x OSM Antenna-Contact / U.FL-Connector (optionally)
 - > 1x SDIO-Card
 - > 1x I2C
 - > 2x ADC
 - > 4x GPIO, 2x UART, 1x SPI



About OSM™

The Open Standard Modules™ specification was adopted by the SGeT e.V. in 2019. The new standard was developed to meet future requirements in terms of **flexibility**, **scalability**, but also **costs**. OSM™ solder-down modules can be **individually adapted** to the respective customer requirements. For this purpose, the individual modules can be made **available to the SMT process** by means of tray & reel packaging and processed automatically. The OSM™ series includes in total four different form factors.



iesy.com/osm