

System on Module iW-RainboW-G54M

STM32MP135 OSM SF LGA Module



The STM32MP135 SoC-based LGA modules are designed as per the Open Standard Module[™] Size-S Specification. The LGA module is rich with all the OSM Size S features. The module supports both secure boot and basic security-supported variants of the SoCs.

This OSM LGA Module can be used for a wide variety of industrial & factory automation, Medical and healthcare, Industrial HMI, EV Chargers and security-based applications.

iW-RainboW-G54M HIGHLIGHTS

STM32MP135: Cortex®-A7@upto 1 GHz

DDR3L - 512MB (Expandable up to 1GB)

eMMC -4GB (Expandable up to 128GB)

Industrial Grade (-40°C to +85°C)

OSM v1.1 Size-SF LGA Module with 30mm x 30mm form factor

10+ years of Product Longevity Program

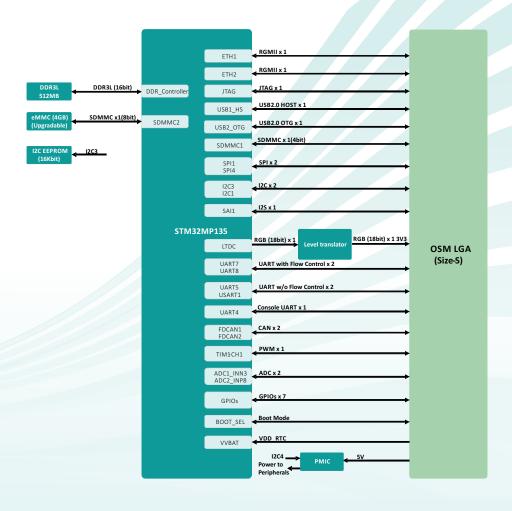
SPECIFICATIONS

STM32MP135 Applications Processor
STM32MP135: Single Cortex®-A7@upto 1 GHz
PMIC
All Power required for the Module are generated using the STPMIC1EPQR PMIC from STM
Memory & Storage
DDR3L – 512MB(Expandable up to 1GB)
eMMC – 4GB(Expandable up to 128GB)
I2C EEPROM – 16Kbit
OSM LGA Features
RGMII x 2 Ports
USB2.0 Host x 1
USB2.0 OTG x 1
RGB (18bit) x 1 Port
SDMMC (4bit) x 1 Port
SAI x 1 Port
UART with flow control x 2 Ports

UART w/o flow control x 2 Ports	
Debug UART x 1 Port	
CAN x 2 Ports	
SPI x 2 Ports	
I2C x 2 Ports	
JTAG x 1 Port	
PWM X 1 Port	
ADC X 2 Ports	
GPIOs x 7	
OS Support	
Linux 6.1.28	
Power Input:	
5V , 0.5A through OSM LGA	
Form Factor:	
OSM Size SF - 30mm x 30mm	
Operating Temperature:	
Operating Temperature: -40°C to +85°C (Industrial)	
-40°C to +85°C (Industrial)	



STM32MP135 OSM LGA Module Block Diagram



OS SUPPORT

Linux 6.1.28

DELIVERABLES

STM32MP135 OSM LGA Module **Board Support Package** User Manual **Quick Start Guide**

OPTIONAL KITS/Modules

STM32MP135 OSM LGA Module

CUSTOM DEVELOPMENT

BSP Development/OS Porting Custom SOM/Carrier Development Custom Application/GUI Development Design Review and Support

iWave Systems Technologies is an ISO 9001:2015 certified company, head quartered in Bangalore India established in the year 1999. The company focuses on providing embedded solution and services for Industrial, Medical, Automotive and various other Embedded Computing applications. iWave Systems offers wide range of System On Modules and Single Board Computers built using wide range of CPU and FPGA SoC platforms with different form factors such as Qseven, SMARC, SODIMM and HPC by closely working with Tier-1 silicon companies such as NXP, Xilinx, Intel etc.

iWave Systems offers various state of art ready ODM solutions such as Connected Telematic Control Unit / OBD II devices for the automotive edge analytics, Comprehensive ARINC818 solutions for the low latency Aerospace applications and Rugged IP rated performance scalable HMI solutions for Industrial applications.

iWave Systems also provides comprehensive Engineering design services involving Embedded Hardware, FPGA and Software development. iWave offers carrier board and custom hardware development with manufacturing and certification services.iWave's Hardware expertise spans complex board design up to 30 layers; Analog, Digital & RF Designs; FPGA Development up to 3+ million gates and VHDL / Verilog RTL Development & Verification. Our Software expertise ranges from OS Porting, Firmware & Device Drivers Development and Wireless & Protocol Stacks.

Note: iWave reserves the right to change these specifications without notice as part of iWave's continuous effort to meet the

best in breed specification. The registered trademarks are proprietary of their respective owners.

STM32MP135 OSM LGA Module

The device can be ordered online from the iWave Website https://www.iwavesystems.com/product/stm32mp135-osm-sf-lga-system-on-module/ Or from our Local Partners in your region

http://www.iwavesystems.https://www.iwavesystems.com/

INDIA

iWave Systems Technologies Pvt Ltd. #7/B, 29th Main, BTM Layout 2nd Stage. Bangalore - 560 076 mktg@iwavesystems.com

JAPAN

iWave Japan Inc. 8F Kannai Sumiyoshi Building, 3-29 Sumiyoshi-cho, Naka -ku, Yokohama Kanagawa, Japan mktg@iwavesystems.com

EUROPE

International Sales & Marketing Europe Venkelbaan 55 2908KE Capelle aan den lissel. info@iwavesystems.eu

USA

iWave USA 1692 Westmont Ave. Campbell Ca95008 info@iwavesystems.us