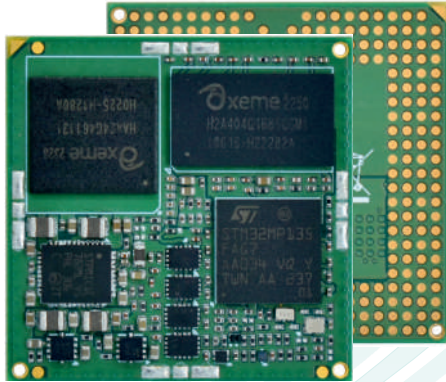


# System on Module iW-RainboW-G54M STM32MP135 OSM SF LGA Module



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.

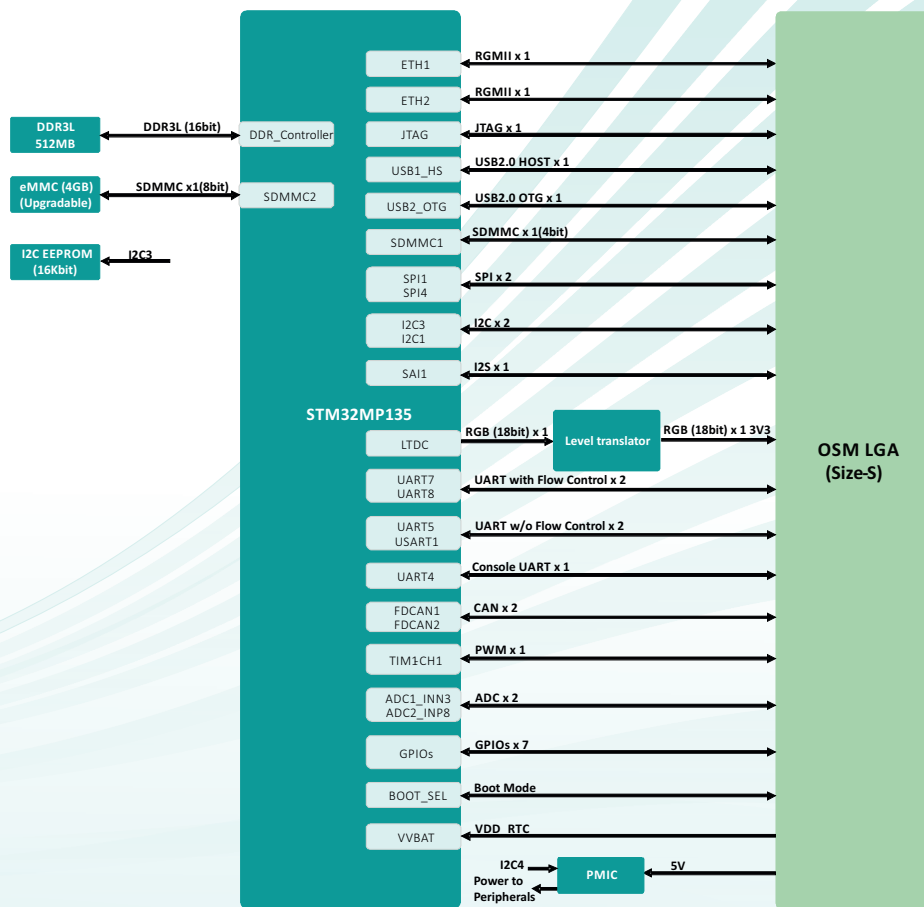
## iW-RainboW-G54M HIGHLIGHTS

- 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

<b>SoC</b>	STM32MP135 Applications Processor	UART w/o flow control x 2 Ports
<b>STM32MP135:</b>	Single Cortex®-A7@upto 1 GHz	Debug UART x 1 Port
<b>PMIC</b>	All Power required for the Module are generated using the STPMIC1EPQR PMIC from STM	CAN x 2 Ports
<b>Memory &amp; Storage</b>	DDR3L – 512MB(Expandable up to 1GB)	SPI x 2 Ports
	eMMC – 4GB(Expandable up to 128GB)	I2C x 2 Ports
	I2C EEPROM – 16Kbit	JTAG x 1 Port
<b>OSM LGA Features</b>	RGMI x 2 Ports	PWM X 1 Port
	USB2.0 Host x 1	ADC X 2 Ports
	USB2.0 OTG x 1	GPIOs x 7
	RGB (18bit) x 1 Port	<b>OS Support</b>
	SDMMC (4bit) x 1 Port	Linux 6.1.28
	SAI x 1 Port	<b>Power Input:</b>
	UART with flow control x 2 Ports	5V , 0.5A through OSM LGA
		<b>Form Factor:</b>
		OSM Size SF - 30mm x 30mm
		<b>Operating Temperature:</b>
		-40°C to +85°C (Industrial)
		<b>Environment Specification</b>
		REACH & RoHS3 Compliant

## 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.com> <https://www.iwavesystems.com/>

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