



L&T SEMICONDUCTOR TECHNOLOGIES LIMITED

ENABLING SMART CONNECTIVITY

WITH LTSCT SAC20 MODULES



SIMPLIFIED DESIGN



Flexibility



Scalability



Performance

Empowering the Future with Intelligent Modules

In an era where seamless connectivity and intelligent performance are redefining industries, LTSCT leads the way with a powerful portfolio of advanced module-based solutions. Our offerings are built to accelerate innovation across automotive, energy, industrial automation, consumer electronics, and communication infrastructure. Integrating the latest in 5G, LTE, and AI technologies, our modules deliver ultra-fast, reliable, and energy-efficient performance, ensuring adaptability and excellence for industrial, consumer, and IoT applications alike.

SAC20 – Smart Module

Overview

The SAC20 is a high-performance Smart LTE CAT 4 module equipped with Wi-Fi and Bluetooth capabilities. Powered by a Qualcomm® ARM Cortex-A53 64-bit Quad-core processor and an integrated Adreno 702 GPU, Designed to meet the demands of both industrial and consumer applications, offering high data rates, multimedia support, and extended lifespan.



Key features



ARM Cortex-A53 64-bit Processor (Quad-core)



Qualcomm Adreno™ 702 GPU



Android OS 14, up to 15



4G CAT 4



2G Fallback



Max. 150 Mbps (DL)
Max. 50 Mbps (UL)



Wi-Fi - IEEE 802.11 a/b/g/n/ac



Bluetooth 5.0 (BR/EDR + BLE)



GPS/BDS/GLONASS/
Galileo/NAV IC/L1 Band



Dual ISPs and up to 25MP camera @ 30fps



LCC + LGA Package



Integrated LCD Touchscreen interface

Typical Applications



POS Machines



Self Checkout



2W Clusters



Industrial Handhelds



Ground Controllers



Vending Machines



Surveillance Displays

SAC20 Specifications

Basic Specification

Processor	Quad-core ARM Cortex-A53 64-bit CPU @ 2.0 GHz Inbuilt GPU: Adreno 702 @ 845 MHz
RAM	2 GB LPDDR4X (Upgradable up to 3 GB)
Flash	16 GB eMMC (Upgradable up to 64 GB)
OS	Android 14 (Service till Android 15)

Radio Technology

RAT Used	LTE Cat 4 with 2G Fallback
3GPP Release	10
Secondary Wireless Protocols	WLAN, BLE

Bands

LTE BANDS

Europe/Asia

FDD	B1/B3/B5/B7/B8/B20/B28
TDD	B38/B40/B41

North America

FDD	B2/B4/B5/B7/B12/B13/B14/ B17/B25/B26/B66/B71
TDD	B41
GSM Bands	900 /1800 MHz

WLAN and BLE Specifications

WLAN Frequencies	2.4GHz & 5GHz
WLAN Standard	802.11a/b/g/n/ac
BLE Specifications	v2.1 + EDR and v3.0 + HS Modes
BLE Standard	BLE 5.0 Modes

GNSS

Constellation Coverage	GPS/BDS/GLONASS/Galileo/ QZSS/SBAS, L1 Band
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Network Speed (Peak)

Cat 4	DL 150Mbps & UL 50 Mbps
GSM	DL 236.8Kbps & UL 236.8 Kbps

Packaging

Form Factor	LCC + LGA
Dimensions	40.4 x 40.4 x 2.7 mm
Pin Count	274

Interfaces

MIPI_CSI (4-lane)	x2
MIPI_DSI (4-lane)	x1
USB 3.1	x1
USIM	x2
UART	x3
Main ANT	x1
DIV ANT	x1
GNSS ANT	x1
Wi-Fi, BLE	x1
GPIO	31*
SDC	x1
ADC	x1
I2C	x2*
Touch Panel (I2C)	x1
I3C (Sensors for Accel + Gyro)	x1
SPI / UART	x2*
MIC (Analog)	x2
DMIC	x2
Analog Audio Out	X3

Power











Input Power	3.9 V (Typ)
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Temperature Range

Operating Range	-20° C to 80° C*
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**Pre-release version document, some features/specifications are subject to change*

Other Smart Module Offerings from LTSCT – Coming Soon

5G Module	Automotive	Smart Module
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Global Footprint



INDIA

S2 Building, 10th floor, L&T Tech Park,
Bellary Road, Next to Raintree
Boulevard, Park View Layout,
Byatarayanapura, Bengaluru 560092

TC 3 Building, Tower B 2nd floor,
A Wing Mount Poonamallee Road
Manapakkam, Chennai 600089

Tower-Express Trade, Plot 15 & 16,
Film City, Sector 16A, Noida,
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UNITED STATES

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230, Austin, TX 78746

EUROPE

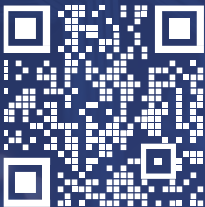
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