



SOHAMSAA SYSTEMS PVT LTD

Company Profile

An Electronic System Design & Manufacturing house creating innovative, highly differentiated products — from industrial design and core software to certified, mass-produced hardware.

Delhi, India · www.sohamsaa.com

What's *inside*

<i>i</i>	Introduction	Who we are, core expertise, engineering capabilities & unique proposition
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Who *We* Are

—
IDENTITY

An Electronic Product Design and Manufacturing house focused on developing innovative and highly differentiated products.

End-to-end capability — industrial design, mechanical & PCB design, core software, wireless technologies, certification and manufacturing.

—
VISION

To be an ESDM house globally respected for Innovation and Excellence in product quality.

—
MISSION

We will create superior products in an environment of Fairness, Honesty and Joy for all our stakeholders — Customers, Employees, Partners and the Society.

— CAPABILITIES

Core Expertise & *Services*

CORE SOFTWARE

Device drivers
Audio / video decoding
Stacks & protocols
Board Support Package (BSP)

WIRELESS

4G TD-LTE / 3G / 2G
Wi-Fi 802.11 a/b/g/n/ac
LoRa · BT · NFC · Zigbee
GPS / FM

ANDROID / LINUX

Kernel — modules & drivers
Board bring-up
Android framework
App development & integration

WIRELESS / OPTICAL

GPON ONU / Router
Segregator
IP OTT media gateways

SERVICES BOUQUET

PRODUCT ENGINEERING

End-to-end design · Industrial design
Mechanical CAD · Hardware & PCB design
New Product Initiation (NPI)
Logistics & supply chain

SOFTWARE ENGINEERING

BSP & device-driver integration
Android porting & application development
Custom software integration

CONSULTING

Solution definition
Value engineering
System architecture

Core Engineering *Capabilities*

ELECTRICAL

System architecture, electrical CAD, electro-mechanical convergence

MECHANICAL & ID

Experience & industrial design, mechanical system design, mechanical CAD, component design

RF

Antenna design, RF layout & validation

CORE SOFTWARE & OS

System boot, firmware, system drivers, peripheral drivers

APPLICATION

Firmware, Android applications, custom integrations

VALUE ENGINEERING

BOM optimization, cost optimization

NPI

Manufacturing process setting, test jigs & test software

SOURCING

Component sourcing, BOM management, cost optimization strategy

CERTIFICATION & COMPLIANCE

Technology consulting, certification & compliances, system architecture & definition

Unique *Proposition*

i Innovation & Design Excellence

Cutting-edge designs with future-ready technology capabilities
Scalable development process to drive multiple variants
Proven design process with rapid time-to-market certainty

ii Custom Design & Localization

Portfolio development aligned with business strategy & product roadmap
Exclusivity — product features, geography, industrial design
High localization & value engineering enabling India-based mass production

iii IP Protection

Rigorous intellectual-property protection — ID, electrical & mechanical design, custom components, custom UI & UX
Strict non-disclosure regime

iv Control

Customer participation in design and productization processes
Greater clarity on design & production costs to the customer

Three Phase Smart *Energy* Meter

IS:16444 Part 1 · BIS Certified · 4G / NB-IoT / RF Mesh



KEY FEATURES & SPECIFICATIONS

Ratings	10(60)A, 10(100)A — Direct & CT-connected
Communication	4G/2G, NB-IoT, RF Mesh (plug-in NIC)
Protocol	DLMS/COSEM · Plug & Play · Self-register
Security	AES-GCM-128 encryption + AES-128 Key Wrap
Tamper Detection	Magnet · AC/DC chopping · Connection tamperers
Load Control	Latching relay >10,000 cycles · Remote switch
Metering Modes	Pre-paid & post-paid · TOU up to 8 rates
AMI	Self-healing · Remote FW update · Auto-register
Enclosure	Ultrasonic welded · 35kV surge immune · IP54

Three Phase Meter — Technical *Specifications*

Parameter	Value / Range
Reference Standards	IS 16444, IS 13779, IS 15959, IS 15884, CBIP 325, IEC 62052-11, IEC 62053-21/22, IEC 62056 (DLMS)
Voltage (Direct)	3×220/380V – 3×240/415V
Voltage (CT)	3×57.5/100V – 3×240/415V
Current (Direct)	10(60)A, 10(100)A
Current (CT)	1(5)A, 5(6)A, 5(10)A, 1(10)A
Starting Current	0.2% Ib (Direct) 0.1% Ib (CT)
Frequency	50 Hz / 60 Hz

Parameter	Value / Range
Accuracy Class	Active: Class 1 (Direct) / 0.5S (CT) Reactive: Class 2
Ingress Protection	Up to IP 54
Operating Temp.	-25°C to +70°C
Storage Temp.	-40°C to +80°C
Relative Humidity	≤ 95%
Local Interfaces	Optical port (sealable) · Optional: RS485, RS232, BLE
Remote Comm.	RF Mesh / GPRS / 3G / 4G / NB-IoT
Dimensions	232 mm × 164 mm × 73.5 mm

Single Phase Smart *Energy* Meter

IS:16444 Part 1 · BIS Certified · 4G / NB-IoT / RF Mesh



KEY FEATURES & SPECIFICATIONS

Ratings	5(30)A, 5(40)A, 5(60)A, 10(60)A
Communication	4G/2G, NB-IoT, RF Mesh (plug-in NIC)
Protocol	DLMS/COSEM · Plug & Play · Self-register
Security	AES-GCM-128 encryption + AES-128 Key Wrap
Tamper Detection	Magnet · AC/DC chopping · Connection tamperers
Load Control	Latching relay >10,000 cycles · Remote switch
Metering Modes	Pre-paid & post-paid · TOU up to 8 rates
AMI	Self-healing · Remote FW update · Auto-register
Enclosure	Ultrasonic welded · 35kV surge immune · IP54

Single Phase Meter — Technical *Specifications*

Parameter	Value / Range
Reference Standards	IS 16444, IS 13779, IS 15959, IS 15884, CBIP 325, IEC 62052-11, IEC 62053-21, IEC 62056 (DLMS)
Voltage	Operating range 110V – 240V
Current	5(30)A, 5(40)A, 5(60)A, 10(60)A (other combinations on request)
Starting Current	0.2% I _b
Frequency	50 Hz / 60 Hz
Accuracy Class	Active: Class 1 Reactive: Class 2 (optional)

Parameter	Value / Range
Ingress Protection	Up to IP 54
Operating Temp.	-25°C to +70°C
Storage Temp.	-40°C to +80°C
Relative Humidity	≤ 95%
Local Interfaces	Optical port (sealable) · Optional: RS485, RS232, BLE
Remote Comm.	RF Mesh / GPRS / 3G / 4G / NB-IoT
Dimensions	232 mm × 164 mm × 73.5 mm

Single Phase *Static* Energy Meter

IS:13779 (2020) · BIS Certified · IRDA Communication



Utility-ready static metering — proven, certified, in production.

KEY FEATURES & SPECIFICATIONS

Standard	IS:13779 (2020) — BIS Certified
Ratings	5–30A direct connected
Communication	IRDA optical interface
Billing	Monthly billing — utility ready
Tamper Detection	Magnet · AC/DC chopping · Connection tamperers
Accuracy	Active: Class 1
Utility Tamperers	Utility-specific tamper detection
Enclosure	Ultrasonic welded · 35kV surge immune · IP54
Dimensions	163 mm × 133 mm × 68 mm

Identity & *Fintech* Devices



bioTAB

Biometric-enabled tablet

7" Android tablet · STQC / UID-certified optical finger sensor · 3G, Wi-Fi, BT, GPS



TRITON

Handheld terminal

Android POS · integrated 2" thermal printer · NFC, smart cards, Aadhaar identification



EFFICA

Modular thermal printer

2" thermal printer · BLE, NFC, USB · optional biometric sensor & MSR



bioBT

Bluetooth biometric sensor

Portable OTT device · STQC-certified sensor · last-mile eKYC & DBT

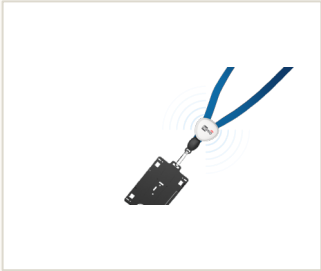


VIVO

NFC card reader

NFCIP-1/2 · ISO 14443 A/B, 15693, FeliCa™ · BLE & USB · 3 operating modes

IoT & *Sensing* Devices



TAGPRO

BLE attendance tag

Coin-cell BLE proximity tag · ARM Cortex-M0 · attendance, safety & tracking



BEACON

Proximity sensing

BLE beacon · immediate / near / far zones · retail, tourism & indoor navigation



BRET

Temp & humidity sensor

BLE 4.0 + LoRa to 10 km · cloud via LoRaWAN · data centers, hospitals, cold chain



AMBER

Motion sensor

BLE 4.0 + LoRa · rechargeable · security, asset & aquaculture monitoring



THE HUB

Home automation hub

Connects sensors up to 10 km · Wi-Fi, LoRa, 2G/3G · Ethernet & SLIC

Connectivity & *Media* Devices



MIFI ROUTER

Pocket 4G router

CAT4 150/50 Mbps LTE · 2x2 MIMO
Wi-Fi · 6+ users · 6+ hrs battery



GPON ONT

Single-port fiber terminal

Gigabit fiber input · 1 GigE output ·
BOSA & transceiver options · low-
cost CPE



MEDIA GATEWAY

Home media gateway

Fiber input · 3x GigE · 3x3 MIMO Wi-
Fi · USB storage · optional LTE &
DECT



CUBECAST

HD streamcasting

Android dual-core · 1080p over
HDMI · app-controlled streaming &
shared media



GPS TRACKER

Tracker & distress device

GSM/GPRS + GPS · SMS/GPRS
distress alerts · power bank & LED
flashlight

Solutions that *complete* the hardware

i

LeZgo!

Incredible experience, lasting memories

Android travel solution reshaping the tourist experience — integrated with Sohamsaa beacons for immersive, location-aware content.

USE CASES

Pre-travel, on-travel & post-travel tools
Rich attraction content for Indian tourism sites
Covered by national media at Rajasthan launch

ii

Authintik

KYC and validation solutions

Aadhaar-based KYC and validation suite on Windows and Android, using the Sohamsaa AUA for real-time Aadhaar access.

USE CASES

Works with all major fingerprint modules
Hotel & tourism guest validation
Contract-worker and retail KYC

iii

Pigmy

Automating small savings

Fully automates the pigmy small-savings collection process, integrated with core-banking software of co-operative banks.

USE CASES

BT-integrated with EFFICA thermal printer
Cloud dashboard for fraud reduction
Micro-finance, NBFC & chit-fund collections

Partnerships & *Customers*

CHIP & SUB-SYSTEM PARTNERS

Strategic partnerships with global semiconductor majors — including a published partnership with ST Microelectronics for IoT and smart devices.

COMPONENTS

Long-standing component partnerships across India, US, EU and China for resilient sourcing.

3G & 4G LICENSING

Licensed cellular technology partnerships enabling 2G / 3G / 4G product lines.

DISTRIBUTION

Distribution partnerships taking Sohamsaa designs to customers across markets.

*Representative customers — **Business Worldwide**. Enterprise, government and utility programs across India and international markets.*

Awards, Accolades & *Press*

i Best Booth Award

Winner of the Best Booth Award for Innovative Products at the Global ARM Technology Symposia, Bangalore — Nov 2013.

ii Key ESDM Player

Featured among 24 Indian companies to watch in the “Semiconductor Market in India 2014–2020” research report.

iii ST Microelectronics

Press release by ST Microelectronics, a global semiconductor giant, on its key partnership with Sohamsaa to develop IoT and smart devices.

iv National Press

LeZgo! travel app covered by The Hindu, NDTV, India Today, Financial Express and Business Standard at its Rajasthan tourism launch.



Thank *You*

For further information and discussions, please contact

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Dream . Design . Deploy