

## RZ Ecosystem Partner Solution NTX Embedded SPADA SERIES



### Solution Summary

Spada is a versatile HMI platform featuring pre-developed building blocks, customizable to meet application needs, optimize performance, and match the client's cost requirements.

NTX offers end-to-end design services to manufacturing expertise for rapid product launch - UI/UX, touch screen solutions, application software, middleware, controls firmware, mechanical, and system board level design.

### Features/Benefits

- Renesas [RZ/G MPU](#) powered HMI platform
- High Quality TFT display
  - 50,000 hours
  - 1,000 cd/m<sup>2</sup> available
  - Various display sizes
- Multi-touch, high durability touch screens
- Extensive set of peripherals and I/Os
- Designed to meet various UL and IEC standards
- Fit-Form-Function customizable for OEM designs

### Diagrams/Graphics



Integrated Display		Advanced Features		Core & Memory	
4.3", 5", 7", 10.1", 15", & more display sizes		AI for Edge Data Processing	Low Power Standby Mode	Single/Dual Core 64bit A53 1.2 GHz/A55 1GHz	
Supports up to 1080p resolution		Co-Processor Cortex-M33	12 bit A/D	Up to 8GB EMMC	
Projected Capacitive Multi-Touch Screen		Dual Independent Displays	Dual Ethernet	Up to 2GB DDR	
Power VR GE8300 / Mali-G31 GPU		Cryptographic HW	H.264 Video Playback	Micro SD	
Peripherals			I/O		
Mono or Stereo Speakers	Microphone In		SPI	i2C	UART
Wi-Fi, Cellular, & BLE	External Camera & Monitor		RS485	HDMI	USB
Analog Sensors	Industrial Controllers / PLC		RS232	PCIE	JTAG / Console
					CAN
					100/1000 Ethernet
					GPIO
Operating System, Middleware, & Drivers					
QT Graphics Library	Security & Crypto Software	CIP Linux	Custom Drivers	Yocto Distribution	Weston Desktop

### Target Markets and Applications

- Food Service Equipment
- Industrial Automation
- Kiosks/Signage
- Security & Access Control
- Energy Service Equipment
- Medical

<https://ntxembedded.com/>

# HMI Total Solution Provider



NTX is a leading U.S. based HMI and industrial controls supplier. NTX offers end to end services from design to manufacturing to accelerate time-to-market with proven solutions. Our products are deployed in a variety of applications from commercial cooking equipment to security and access control devices.

Our extensive design experience, coupled with an integrated supply chain and state-of-the-art manufacturing facilities, evolves your ideas to market-ready product with best-in-class elegance, performance, quality and cost.

## Engineering & Design



Our experts deeply immerse themselves in your product for full comprehension of its human-machine interaction needs, developing and keeping your product running the way it should.



Scalable Performance Options



Quick to Market Development Process



Thorough Qualifications & Validation Process



Sustained Engineering & Product Optimization

## Design Services

Our team can provide clean sheet embedded design as well system re-engineer.

-  UX/UI Design
-  Display & Touch Screen
-  Software Design
-  Mechanical Design
-  Hardware Design
-  Quick Turnaround Prototypes
-  IoT Gateway
-  Production Test Bed
-  Controls Algorithm
-  Product Lifecycle Support

## Manufacturing & Support

We've matured a supply chain infrastructure with numerous long-term, upstream critical component partners.



ISO: 9001 Certified Facilities



In-house PCBA & Box-built Assemblies ( 2 plants)



PFMEA & DFM For Product Quality Robustness



Software/Hardware Updates & Enhancement



Continuous Reliability Testing



Full Product Testing & Burn-in



Product Life-cycle Management



Highly Responsive Customer Service Team

