

# Human Machine Interface



**INTEGRITY**



**TouchGFX**

iWave comes with the background of vast experience of SOM ODM business with added advantage of design service for industrial, automotive, health care and embedded solution. iWave's HMI Solutions are scalable that can be expanded anytime as required and can be categorized into high-performance that is embedded into machines, low-power for process monitoring and standard ones for independent use. Not only Keeping customers' benefits in mind, all iWave's HMI Products are equipped with appropriate Software OS, necessary drivers and other accessories making our products 'Application Ready'. Thus our customers needn't have to bother about OS, Drivers / Libraries and can solely focus on usage and its applications.

## Applications:

- Automotive Validator, Driver Console
- Food and Beverage (Coffee machine, Vending machine, POS)
- Packaging
- Industrial HMI or Operator Interface Terminal (OIT)
- Medical & Healthcare Automation
- Home & Building Automation
- Digital Signage (Indoor and Outdoor)

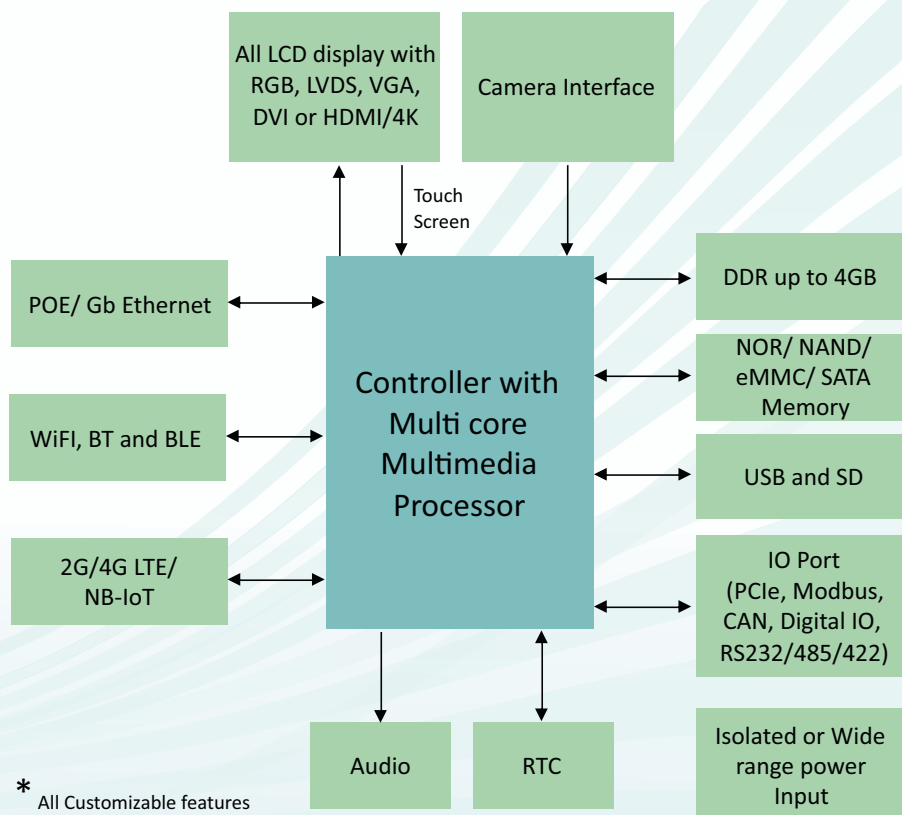
## HIGHLIGHTS

- Open architecture feature to Quickly customize customer requirement and get manufactured/fitted into any customer application
- Customize performance starting from microcontroller to Multi core High performance ARM SoC
- With complete range of processors, can support LCD from 3.5 Inch to available LCD size and resolution. Support LCD with RGB, LVDS, VGA, DVI or HDMI/4K interface
- Customized wired Connectivity and wireless connectivity
- Various OS support with suitable GUI framework
- Long Term product support
- Features like USB3.0, POE supported
- One stop Shop for all Hardware, Software and Mechanical requirement of HMI ODM solution

## SPECIFICATIONS

<b>System Processor and Memory:</b>	Wireless connectivity (WiFi, BT, 2G/3G/4G, NB-IoT)
uC, Multi core High performance ARM SoC	I2C, SPI
RAM upto 4GB memory interface	Audio
NOR Flash, SD, NAND, eMMC Flash, SATA	<b>Operating System:</b>
<b>Display:</b>	Linux, Andriod, Windows Embedded Compact (WEC), RTOS (FreeRTOS, Integrity and QNX)
Support LCD with RGB, LVDS, VGA, DVI and HDMI/4K interface	<b>GUI Framework:</b>
<b>Camera:</b>	TouchGFX, Qt, Silver Lite, Direct Show, Crank software
Parallel/MIPI Camera	<b>Power Supply:</b>
<b>Touchscreen:</b> Resistive and Capacitive touch	Wide range power Input or isolated power supply
<b>Peripherals:</b>	POE
Wired Connectivity (Modbus, PCIe, Ethernet, USB 2.0/3.0, CAN/RS-232 /422/485(Opto Isolated)	

## Block Diagram of Human Machine Interface



## Our Partners



I.MX6 & I.MX8



RZ/G1x



FPGA Design  
Solutions Network  
Gold

Cyclone V SoC & Arria 10 SoC



ALLIANCE PROGRAM  
CERTIFIED MEMBER — BASE

Zynq 7000 SoC



SD820

iWave Systems Technologies, established in 1999, focuses on Product Engineering Services involving Embedded Hardware, Software & FPGA. The company designs and develops cutting edge products and solutions. iWave has been an innovator in the development of highly integrated, high performance, low power and low cost System On Modules and Development Platforms. iWave's expertise has brought out multiple SOMs based on ARM NXP, Renesas, Qualcomm, Altera, Intel and TI Processors.

iWave System has won the confidence of its customers over the years by being a reliable partner in developing innovative products. Our engineers combine outstanding System design experience to deliver Quality Solutions. iWave specializes across Industrial, Automotive and Medical domains. We support our customers by being time efficient, which in turn helps our customers accelerate time to market their products. iWave has been a Windows Embedded Silver Partner.

*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.*

*\*Optional items not included in the standard deliverables.*



### Ordering the Human Machine Interface - HMI

The device can be ordered online from the iWave Website  
<http://www.iwavesystems.com/HMI>

iW-HMI-BF-R1.0

### iWave Systems Tech. Pvt. Ltd.,

7/B, 29<sup>th</sup> Main, BTM Layout 2<sup>nd</sup> Stage,  
Bangalore-560076, India.  
Ph: +91-80-26683700, 26786245  
Email: [mktg@iwavesystems.com](mailto:mktg@iwavesystems.com)  
[www.iwavesystems.com](http://www.iwavesystems.com)

### iWave Japan, Inc.

8F-B, Kannai Sumiyoshi Building,  
3-29, Sumiyoshi-cho, Naka-ku,  
Yokohama, Kanagawa, Japan.  
Ph: +81-45-227-7626  
Email: [info@iwavejapan.co.jp](mailto:info@iwavejapan.co.jp)  
[www.iwavejapan.co.jp](http://www.iwavejapan.co.jp)

### iWave Europe

Postbus 6197  
3130 DD Vlaardingen  
The Netherlands  
Ph: +31 10 2840383  
Email: [info@iwavesystems.eu](mailto:info@iwavesystems.eu)