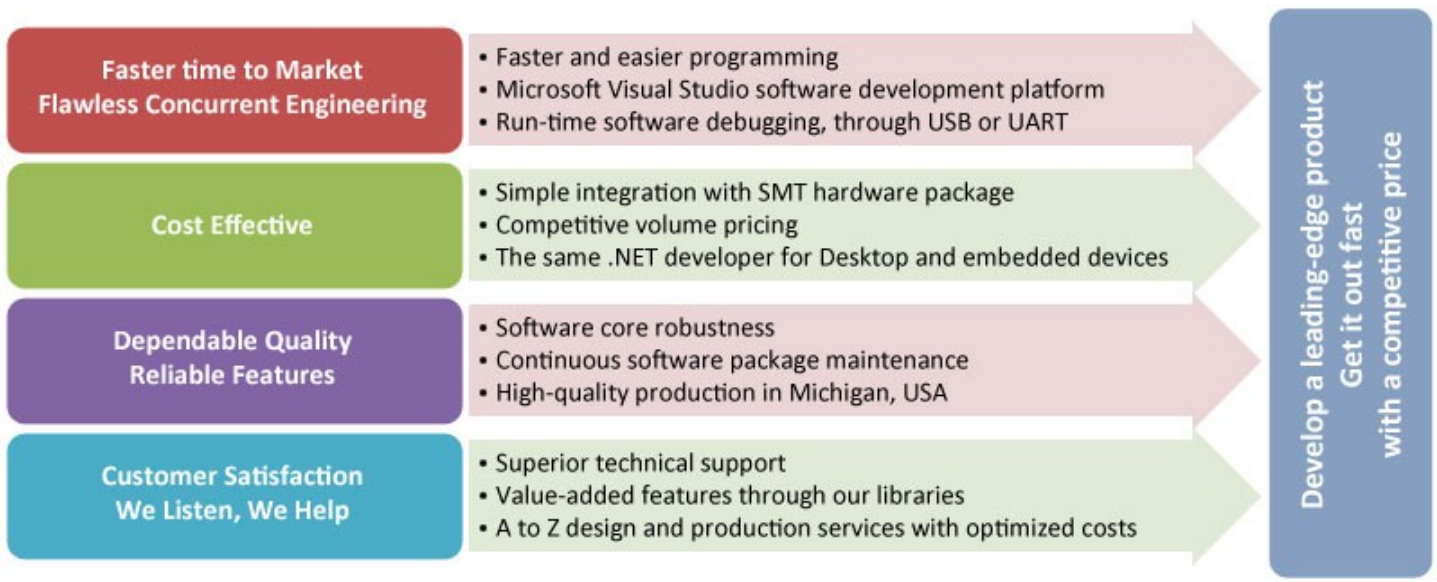


# G400-S Module Specifications

The G400-S Module is a surface-mount System on Module (SoM) that runs the .NET Micro Framework software platform, the most compact version of Microsoft .NET framework. The value of the G400-S Module is not only in the hardware capabilities such as the ARM 926EJ-S core processor, memory and peripherals, but also is in the integration between the hardware and the embedded software. This provides high level features such as a FAT file system, TCP/IP stack, Graphics and Threading to the developer through .NET APIs. Furthermore, the embedded software includes GHI Electronics' extensions to the core .NET Micro Framework. Extensions support important features such as WiFi, USB Host, SQLite, PPP, and In-Field Update. All are provided royalty-free with the G400-S System on Module.

## Benefits



## Key Features

- Atmel AT91SAM9X35 400MHz MPU
- 128 MBytes DDR SDRAM
- 4 Mbytes of Serial Flash
- Embedded LCD Controller
- USB Host/Device with drivers
- 4-bit SD card interface

- Plenty of essential peripherals such as GPIO, SPI, UART, I2C, I2S, CAN, ADC, DAC and PWM.
- High level features such as file system, networking (Ethernet, WiFi), SQLite database, and Graphics.
- Low profile SODIMM
- Supports Visual C# and Visual Basic programming languages

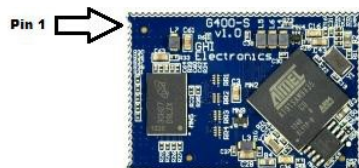
# G400-S Module Specifications

## Applications

- Graphical Human Machine Interface
- Data Logger
- Hand held testers
- Internet of things applications
- Networked alarm systems
- Automation applications
- Controllers, Robotics

## Specifications

Package	SODIMM 200 PINS
Dimensions Length x Height x Thickness	48.25mm x 33.05mm x 4.6 mm
Processor	400MHz 32-bit ARM 926EJ-S Core
Serial FLASH	4 MBytes
DDR2 SDRAM	128 MBytes
Color TFT Display Controller	Available, Multilayer
Graphics (font/controls)	Complete
Image Decoder	BMP, GIF, JPG
Native Networking Support	Ethernet/WiFi/PPP with SSL
Programmable IOs	89
PWM	4
Analog Input	12
UART (COM)	6
SPI	2
CAN	2
I2C	Available
One-wire	Supported on all IOs
USB Host	HID, Mass Storage, CDC, Webcam, Raw
USB Client	HID, Mass Storage, CDC, Raw
4bit SDHC/SD/MMC	Supported
Real Time Clock	Available
Piracy Protection	Available
In-Field Update	Available
Operating Temperature	-40° to +85°
Lead Free RoHS Compliant	Yes
Load native C/assembly	Yes
Power Consumption	Runtime Loadable Procedures
Sleep/Hibernate	98 mA
	See on-line specifications



LDR0	LDR1	Boot Access
X	HIGH	Firmware (user code)
HIGH	LOW	TinyBooter
LOW	LOW	SAM-BA <sup>N2</sup>