FS-GM201
– EPC C1 Gen2 RFID Reader Module

FS-GM201, one of FAVITE RFID reader module family, is a low cost and small size design for fixed or handheld reader device. The FS-GM201 is embedded with Impinj R1000 chip and compliant with EPC Class 1 Gen2 Dense Reader mode (DRM) / ISO 18000-6C. The FS-GM201 could support single and dual antennas with mono-static for different applications. RFID system integrator (SI) could embed FS-GM201 module in own product with the benefits of low cost and operate stability with premium RF performance.

Key Feature

> Impinj R1000 embedded
> Compliant with EPC Class1 Gen2
> Support EPC Dense Reader Mode(DRM)
> Compliant with ISO 18000-6C
> Long reading distance
> Support single and dual antennas
> Adjustable Output Power
> Low Power Consumption
> FCC / ETSI Certification
> Low cost

Application

> Fixed reader
> Handheld reader
> Indoor position system
> POS
> Dock door
> Assets tracking
> Cargo tracking
> Baggage handling
> Access control

System

Host Interface	USB, RS232 (With Daughter Board)
	Mini-PCIe (Without Daughter Borad)
Chipset	PHY: Impinj R1000
	MAC: ATMEL AT91SAM7S-256
Operating Voltages	5.0V+/-5%
DC Power	1.3A @ 30dBm

Protocol

RFID Protocol Support	EPC Class 1 Gen 2; ISO 18000-6C
Support EPC DRM	Yes

RF Features

Frequency	US: 902 ~ 928 MHz / EU: 865 ~ 868 MHz
Demodulation	ASK or PSK
Modulation Depth	90% nominal
Data Encoding	FM0 or Miller code
Bit Rate	Supports uplink data rates of
	up to 640 Kbps
TX Output power	5 ~ 30 dBm in 1dB step
	(Dense Reader Mode)
Antenna Type	Mono-static or Bi-static(option)
Antenna connector	2 SMA connectors

Regulatory and Environmental Compliance

EMC certification	FCC 47 CFG Ch.1 Part 15 (US)
	ETSI EN 302 208-1 (V1.1.1) (EU)
Temperature Range	Operating: -20 ~ +60 degree C
	Storage: -40 ~ +85 degree C
Humidity	10% ~ 85% Non-condensing

Software

Driver	Windows XP / Linux

Mechanical

Dimension	60mm x 40mm x 8mm ± 0.25mm

Housing with Heatsink

Inside Housing

USB Daughter Board

RS232 Daughter Board