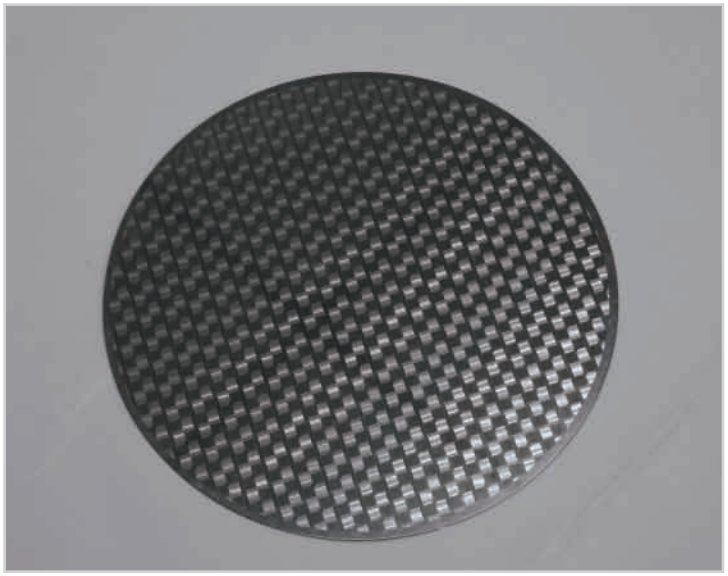
FAVTAG-UHF
– FAVITE UHF Gen 2 RFID Tag IC

FAVTAG-UHF1 is a single chip RFID tag IC which is compliant to EPCglobal™ UHF Class 1 Gen 2 standard. The Chip delivers 64K / 128K EEPROM with superior tag performance and compliant with global spectrum regulations and meets many automatic identification requirements from pallet, case to item level applications.



FAVTAG-UHF1, an EPCglobal™ UHF C1 Gen 2 standard compliant tag IC, delivers superior tag IC performance over the entire UHF bandwidth. This device also provides high speed field rewrite ability and reliable operation in dense reader environment and long read ranges, making it suitable for warehouse or item-level tagging applications.

With large user memory scalable up to 64K / 128K bits EEPROM, FAVTAG-UHF1mainly targets to large-memory-size RFID applications such as temperature and moisture -sensor data storing periodically to tag during transportation, or baggage tag to store all airline ticket information.

FAVTAG-UHF1 is made by single poly 0.18 um logic CMOS -based process which is the most cost-effective for current 8” wafer fabrication. With Favite’s innovative IC design technology, it enables the creation of a true RFID system-on-a-chip integrating analog, digital, and large memory functions on a single die no larger than a sand.

Features

- Interface fully compatible with UHF EPC C1 G2 standard
- Worldwide operation in RFID UHF band (860 MHz to 960 MH)
- Passive operation mode (no battery needed)
- Long-range solutions for read and write
- 10-year/100,000 writes cycle memory retention/endurance
- Extended temperature operation range (–40°C to +125°C)
- Competitive cost structure
- Large user memory, scalable up to 64K / 128K bits
- 96 bits EPC, scalable up to 240 bits
- 64 bits tag Identifier
- 32 bits access password
- 32 bits kill password
- Data validation: CRC-16 and CRC-5
- High performance of anti-collision and inventory speed
- Data rates:

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40 – 160 kbps	40 – 465 kbps (Divide ratio DR = 8) or 95 – 640 kbps (DR = 64/3)

- Write speed: 8 kbps

Applications

- Supply Chain Management
- Distribution Logistics
- Product Authentication
- Asset Inventory and Tracking
- Baggage Handling and Tracking
- Item Level Tagging