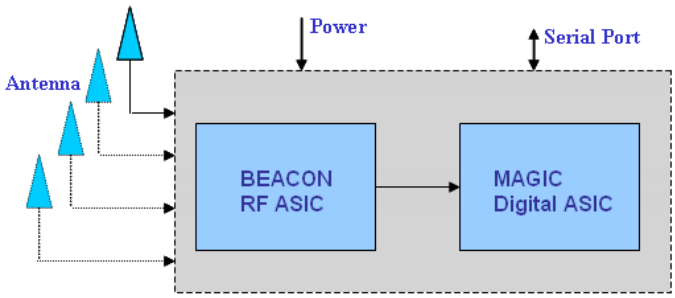
Mayflower Communications™

DATA SHEET

Low-Cost, Low-Power, High Performance Gun-Hard C/A Code GPS Receiver



All Mayflower GPS products are designed to withstand gun shocks of over 20,000 gs and well suited for gun-launched projectile applications.

Performance Specifications:

- A two-chip solution based on Mayflower MAGIC and BEACON ASICs
- 12 Channel All-in-View
- Embedded Datalink Capability
- Embedded Anti-Jam (with Mayflower patented ATF Technology)
- Digital/RF Interface to Mayflower Anti-Jam Solution
- Gun-hardened to 20,000 gs
- High Dynamics operation
- Interface to passive antenna array (upto 4 elements)
- Position Error : < 10 m (1 sigma)
- Velocity Accuracy: < 0.2 m/s (1 sigma)
- Acquisition:
  - Hot Start: 15 s
  - Warm Start: 38 s
  - Cold Start: 50 s
- Tested in highspeed spinning applications
- Spare throughput and memory for optional GNC algorithms
- Low Power: < 400 mW
- Weight: .38 oz (11 grams)
- Size: 40 mm diameter round board

Mayflower has been at the forefront of advancing GPS Receiver and Anti-Jam technologies.

Mayflower's goal has been to provide innovative, advanced technology solutions to Government and Industrial customers that are low-power, low-cost and small in size.

This C/A Code Receiver complements Mayflower's GPS Anti-Jam and SAASM P(Y) GPS Receiver products.

- Connects to Mayflower Anti-Jam (NavProtect) with Digital or RF interface and provides a complete GPS Receiver/Anti-Jam solution in a small volume
- Uses interface (power, signals) which is same as that for Mayflower SAASM P(Y) Code Receiver (NavAssure)
- Target application is as a drop-in replacement for SAASM P(Y) Code Receiver in trial rounds, however, without incurring associated cost and security overheads

All Mayflower GPS Receiver products feature embedded Anti-Jam, based on Mayflower patented ATF technology, to protect against multiple narrowband jammers.

All Mayflower GPS Receivers also feature built-in datalink capability:

- This feature does not require any hardware modification
- Can be used in applications where Low-Probability of Detection is desired
- Typical application being dynamic re-targeting, where the datarate requirements are in the range of several kbps

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