Get your Position!

A1035-D – A High Performance Combination

With an emphasis on fast time to first fix (TTFF), a perfect gain and independence of the surrounding equipment, the A1035-D is the high-performance GPS antenna solution for many applications. Featuring the SiRFstarIII low power chip with an optimized adaptation to a patch antenna one can integrate this module in the easiest way without in-depth RF know-how. Via a board-to-board connector power can be supplied and information is transmitted on a UART CMOS TTL level interface. With the outstanding performance of the SiRFstarIII chipset, getting your position was never faster and easier.

-159 dBm tracking
< 35 s under cold start condition (typical)
36 mA average tracking current
For most accurate position calculation
Standard power I/O connector

**Performance**

- Channels: 20 parallel tracking
- Correlators: 200,000 plus
- Frequency: L1 - 1575 MHz
- Tracking sensitivity: -159 dBm
- Acquisition (cold start): -142 dBm
- Position accuracy (horizontal): < 2.5 m CEP autonomous
- < 2.0 m CEP SBAS
- Time to first fix:
  - Hot start: < 1 s
  - Warm start: < 32 s
  - Cold: < 35 s

**Environment**

- Temperature:
  - Operating: -30°C to +85°C
  - Storage: -40°C to +85°C
- Humidity: Non-condensing

**Power**

- Input voltage: 3.0 to 3.6 VDC
- Average acquisition: 41 mA (typical)
- Tracking: 36 mA (typical)
- Standby: 20 µA (typical)

**Communications**

- Standard GPS software: GGA, GSA, GSV, VTG, RMC, GLL
- Baudrate (in baud): 4,800 (default) to 34,400
- Serial ports: 3.3 V CMOS compatible
- TxO: NMEA output
- RxO: NMEA input

**Mechanicals**

- Dimensions: 35.56 mm x 35.56 mm x 8.0 mm
- Weight: 12 g, < 0.5 oz

1) The receiver has estimates of time/date/position and valid almanac and ephemeris data.
2) The receiver has estimates of time/date/position and almanac.
3) The receiver has no estimate of time/date/position, and no recent almanac.
Positioning Receiver Portfolio

With the mission to support our customers to implement GPS functionality into their systems, Tyco Electronics is offering a large product portfolio to cover almost all integration possibilities in an easy way. A dedicated R&D team located in Ottobrunn, Germany develops sensitive positioning solutions based on state of the art technologies. All GPS products are manufactured in our ISO9001 and TS16949 certified factory inside the EU. Beyond that our modules follow RoHS standard and are 100% electrically and functionally tested prior packaging. This way we constantly guarantee high quality products.

Products shown in actual size

| Model   | Antenna active | Antenna passive | Antenna patch onboard | Antenna status detection | Assisted GPS | Connection plug-in | Connection solderable | Data logging | Dead reckoning | Data Logging Real-time | Differential GPS | RTCM input | Slot Flash, programmable | Slot Flash, read-only | Slot Flash, data | Slot Flash, memory | Slot Flash, memory | Memory: free flash (byte) | Memory: free SRAM (byte) | Processor: available power | Processor: ROM | Processor: SPI interface | Processor: TCXO | Processor: UART NMEA | Processor: USB interface | Processor: UTM projection |
|---------|----------------|-----------------|-----------------------|--------------------------|--------------|-------------------|----------------------|--------------|-----------------|-----------------------|-------------------|-------------|--------------------------|---------------------|-------------------|---------------------|---------------------|--------------------------|--------------------------|-------------------|-----------------|------------------|------------------|---------------------|---------------------|
| A1037-A |                |                 |                       |                          |              |                   |                      |              |                 |                       |                   |              |                          |                      |                   |                   |                   |                          |                      |                   |                |                 |                 |                     |                     |
| A1029-A |                |                 |                       |                          |              |                   |                      |              |                 |                       |                   |              |                          |                      |                   |                   |                   |                          |                      |                   |                |                 |                 |                     |                     |
| A1029-B |                |                 |                       |                          |              |                   |                      |              |                 |                       |                   |              |                          |                      |                   |                   |                   |                          |                      |                   |                |                 |                 |                     |                     |
| A1029-C |                |                 |                       |                          |              |                   |                      |              |                 |                       |                   |              |                          |                      |                   |                   |                   |                          |                      |                   |                |                 |                 |                     |                     |
| A1029-D |                |                 |                       |                          |              |                   |                      |              |                 |                       |                   |              |                          |                      |                   |                   |                   |                          |                      |                   |                |                 |                 |                     |                     |
| A1080-A |                |                 |                       |                          |              |                   |                      |              |                 |                       |                   |              |                          |                      |                   |                   |                   |                          |                      |                   |                |                 |                 |                     |                     |
| A1030-A |                |                 |                       |                          |              |                   |                      |              |                 |                       |                   |              |                          |                      |                   |                   |                   |                          |                      |                   |                |                 |                 |                     |                     |
| A1035-C |                |                 |                       |                          |              |                   |                      |              |                 |                       |                   |              |                          |                      |                   |                   |                   |                          |                      |                   |                |                 |                 |                     |                     |
| A1035-D |                |                 |                       |                          |              |                   |                      |              |                 |                       |                   |              |                          |                      |                   |                   |                   |                          |                      |                   |                |                 |                 |                     |                     |

- Standard firmware: revision 1xx
- Standard firmware: revision 2xx
- With custom firmware support

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