

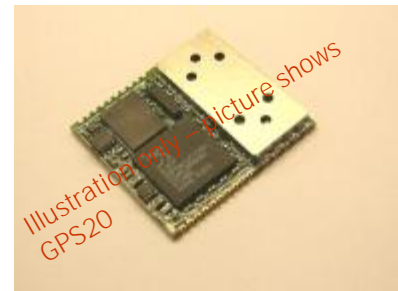
Orcam GPS26 Series

Advanced OEM GPS receiver based on the SiRF GSC2x Chip Set

The Orcam26 Series is a compact, low-power OEM GPS receiver module which allows you to drop-in complete GPS functionality into your product. Its wide input voltage (3,0V – 5,5V) makes it easy for the customer to use. Integration is simple and supported by the tools and techniques of hundreds of designs based on the SiRF family of products. Applications include:

- Fleet Management
- Car and Marine Navigation
- Automatic Vehicle Location (AVL)
- Location-based Services (LBS)
- PDA and Pocket PC applications
- Pet and Child Tracking

Designed without an RF connector, the Orcam21 is a true SMT module that can be used in pick-and-place assembly for high-volume manufacturing.



Designed for
 High Performance *and*
 Reduced Time-to-Market.



Powered by SiRF

The SiRF GSC2x architecture sets a new industry standard for high-volume low power GPS performance. The GPS26 supports signal detection to -152 dBm (SiRFXTrac) using an external active or passive antenna to meet the challenges of multi-path and urban canyon environments. SiRF SingleSat™, SnapLock™, and FoliageLock™ features further enhance performance and are available on a small power budget

Low Power

Efficient power management is critical to the success of portable devices. SiRFTricklePower™ and Advanced Power Management extends battery life by reducing average current to a few mA.

Fast Time-to-Market

The Orcam GPS26 receiver is optimized for high-volume applications where compact size, low cost and rapid development are required. Modular software from an industry leader lets you efficiently integrate the receiver into your design and means that your product can have GPS functionality today, not tomorrow.

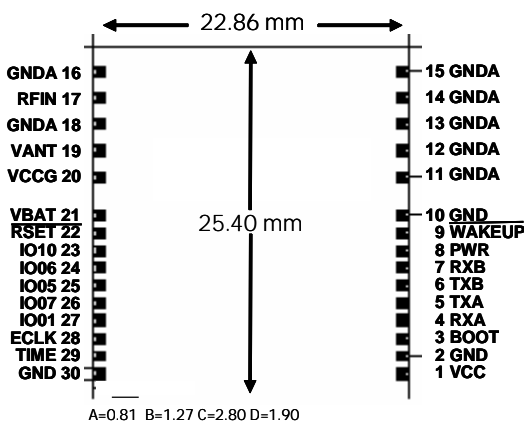
- q** 12 Channel L1 receiver operating on 1575.42 MHz
- q** On board LNA supports use of passive antenna
- q** WAAS, EGNOS and D- GPS enabled
- q** 1 PPS signal
- q** 4 Mbit Flash memory standard, expandable
- q** NMEA and SiRF binary protocol enabled
- q** 3.0 to 5.5 V operation, < 40 mA peak
- q** 25.4 x 22.86 x 3mm
- q** Pick-and-place, reflow solder assembly ready
- q** RoHS Compliant
- q** Pin to pin compatible with Orcam GPS21

Acquisition Performance

- §** 45 s cold start
- §** 38 s warm start
- §** 2 to 8 s Snap start
- §** 0.1 s reacquisition
- §** 5 meter 95%

Preliminary

General Characteristics	Receiver Architecture	12 Channel 1 satellite/channel simultaneous L1, 1575.42 MHz C/A Code 1.023 MHz chip rate
	Performance Characteristics	Position Accuracy Acquisition Rate
Communications	Antenna	approx. 5 meters, 95% of the time <2m, D-GPS on 45 s cold start, typical 38 s warm start, typical 2-8 s Snap start, typical 0.1 s reacquisition, typical
	Processor	External active or passive antenna
	Serial Protocol	ARM7 / TDMI
	Serial Port	NMEA 4800, NMEA 9600 or SiRF Binary
Electrical	Electrical interface	Two TTL level serial ports
	Protocol message	NMEA-0183 and SiRF binary
	D-GPS protocol	RTCM SC-104
Environmental	Main power input	3,15 - 5,5 V
	Supply current	40 mA (peak power) 10 uA (stand by)
Physical	Operating temperature	-40 to +85 °C
	Storage temperature	-55 to +100 °C
	Altitude	18 000 meters (60 000 feet) max.
	Velocity	545 meters/second (1000 knots) max.
Physical	Acceleration	4g max.
	Dimensions	25.4 x 22.86 x 3mm - shielded module
	Connectors	30 pad land grid array



GPS21 Series			
	GPS26	x	x
		↑	↑
Standard		S	
SiRFxtrac		X	
NMEA 4800			A
NMEA 9600			B
SiRF Binary 38400			J
Revision			

Ordering Configuration

Crystal version:

- GPS26SAx Receiver with NMEA 4800
- GPS26SBx Receiver with NMEA 9600
- GPS26SJx Receiver with SiRF Binary

TCXO version:

- GPS26XAx Xtrac™ with NMEA 4800
- GPS26XBx Xtrac™ with NMEA 9600
- GPS26XJx Xtrac™ with SiRF binary

For further information visit www.orkam-gps.com or contact your local Acal representative in:
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Orcam Systems

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