Company

History

1987	Navman Wireless' roots began as Navman, a New-Zealand-based GPS technology company.
1988	Navman launches marine GPS products.
1996	Developed own GPS module based on Rockwell GPS chips.
2001	Navman buys OEM business from Conexant.
2003	OEM division becomes part of Brunswick New Technology Inc., Lake Forest, Illinois
2007	Senior management partnered with Prairie Capital to purchase Navman Wireless and make it a private company.
2008	More than 5 Million Users trust Navman. A-GPS and Dead-reckoning solution J30/31DR
2010	Introduced Jupiter® J-F2 module based on J-3 Formfactor

Global Presence

Company Info

WHO WE ARE

Over 250 employees spread over 9 countries in Europe, N. America, L. America, and Asia Pacific

Over 70+ engineers in research and development

GLOBAL COMPANY WITH FINANCIAL STRENGTH

14 offices worldwide: UK, Ireland, Italy, Australia, New Zealand, Taiwan, China, Singapore, US, Mexico

State of the art R&D facilities in Silicon Valley, California and Auckland, NZ

CONSISTENT PROFITABLE GROWTH

16% increase in workforce in 2010 versus a global employment growth rate of 1.3%**

Actively expanding into Continental Europe, Asia and Latin America

PROVEN RELIABILITY

Design and manufacture own products (complete quality assurance)

Own Asian supply chain office (ensures component quality and availability)

COMPETITIVE ADVANTAGES

Global presence and large customer base can be leveraged to continuously develop the best technologies and product features

Profitable with positive cash flow and strong balance sheet

20 years in GPS products with roots dating back to Conexant, the division of Rockwell who originally developed GPS for the U.S. military

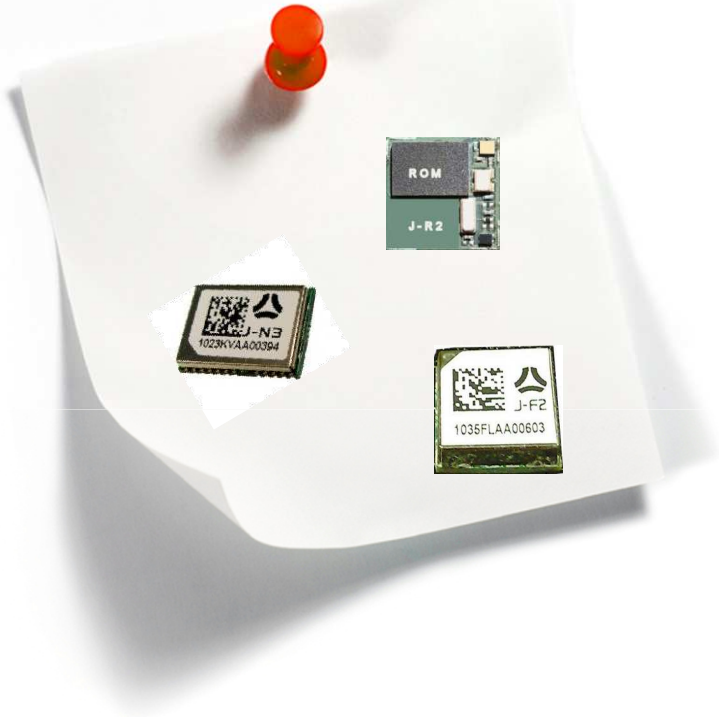
Strong IP portfolio with over 7 patents worldwide, 3 patents recently filed

Jupiter ® Products

Productportfolio

Established Form factor

Jupiter 3 Miniature Module



NEW Jupiter 4 Family

New J-F2 and variants

Jupiter ® SiRFStarIV Highlights

- Sensitivity, -163dBm (TRK) -147dBM (ACQ)
- Full power, 37mA (TRK) 50mA (ACQ)
- ATP, 16mW (1Hz updates)

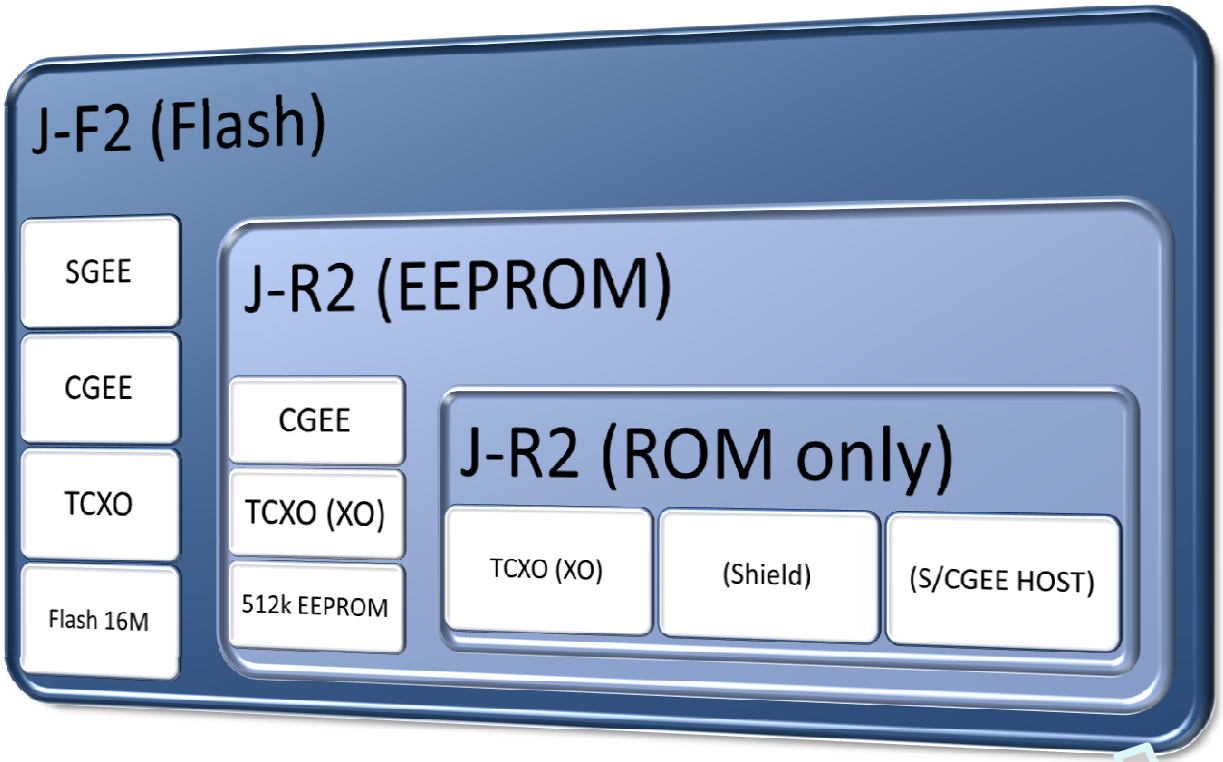
- Single power supply, 1.8V or 3.0V
- Integrated temperature sensor

- Tracks up to 8 jammers
- Removes jammers prior to correlation

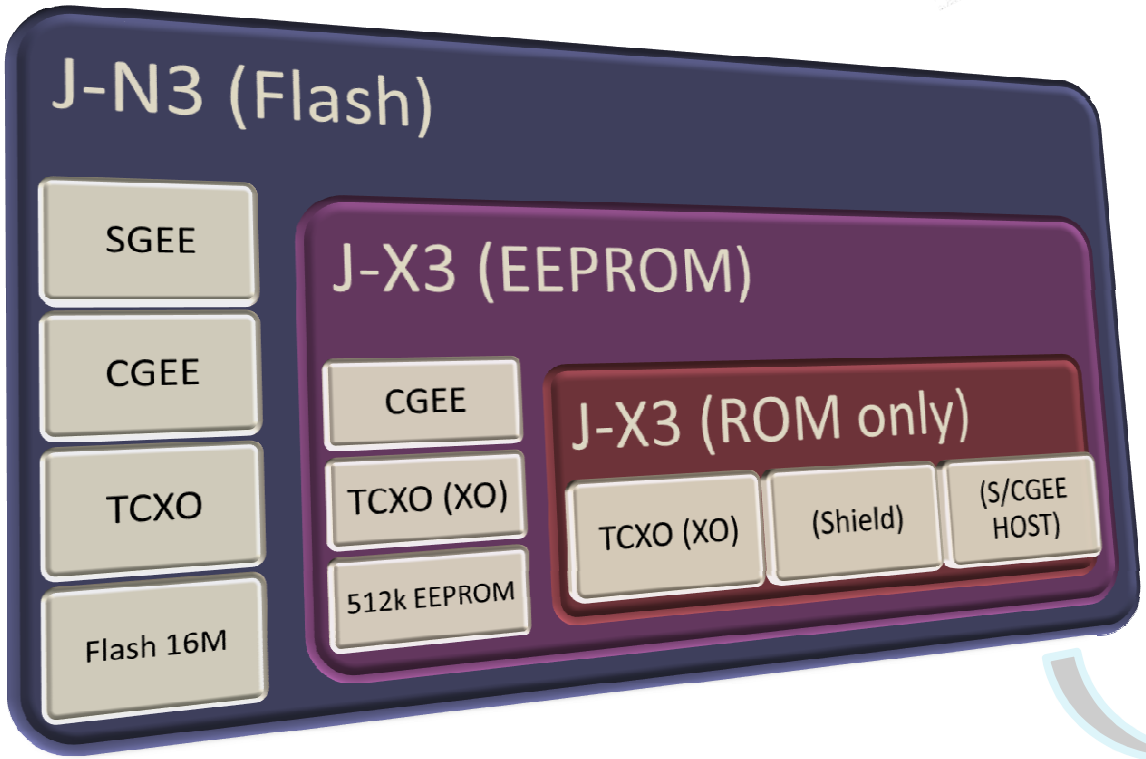
- 2 Update Rates (1Hz and 5Hz)
- Multiple interfaces: I2C, SPI and UART

Performance data based on J-F2 (1.8V)

J-F2 variants 2011



J-N3 variants 2011



Jupiter ® Family

Model	Power		Interfaces		Features										Dimension
SKU	1.8V	3.0V	UART	SPI, I2C	SGEE	CGEE	TCXO	RTC	Power on reset	Shielding Lid	MEMS (Compass, Gyro, Accelerometer)	Programmable	EEPROM	ROM	Footprint
J-F2	•		•	•	•	•	•	•	•	•	•	•			11 x 11 x 2.2 mm
J-R2	•		•	•		•	• (XO)	•	•		•		•		11 x 11 x 2.2 mm
J-R2-Host	•		•	•	Host	Host	• (XO)	•	•		•			•	11 x 11 x 2.2 mm
J-N3		•	•	•	•	•	•	•	•	•	•	•			12.2 x 16 x 2.4 mm
J-X3		•	•	•		•	• (XO)	•	•	optional	•		•		12.2 x 16 x 2.4 mm
J-X3-Host		•	•	•	Host	Host	• (XO)	•	•	optional	•			•	12.2 x 16 x 2.4 mm

All modules are **Stand-alone GPS**

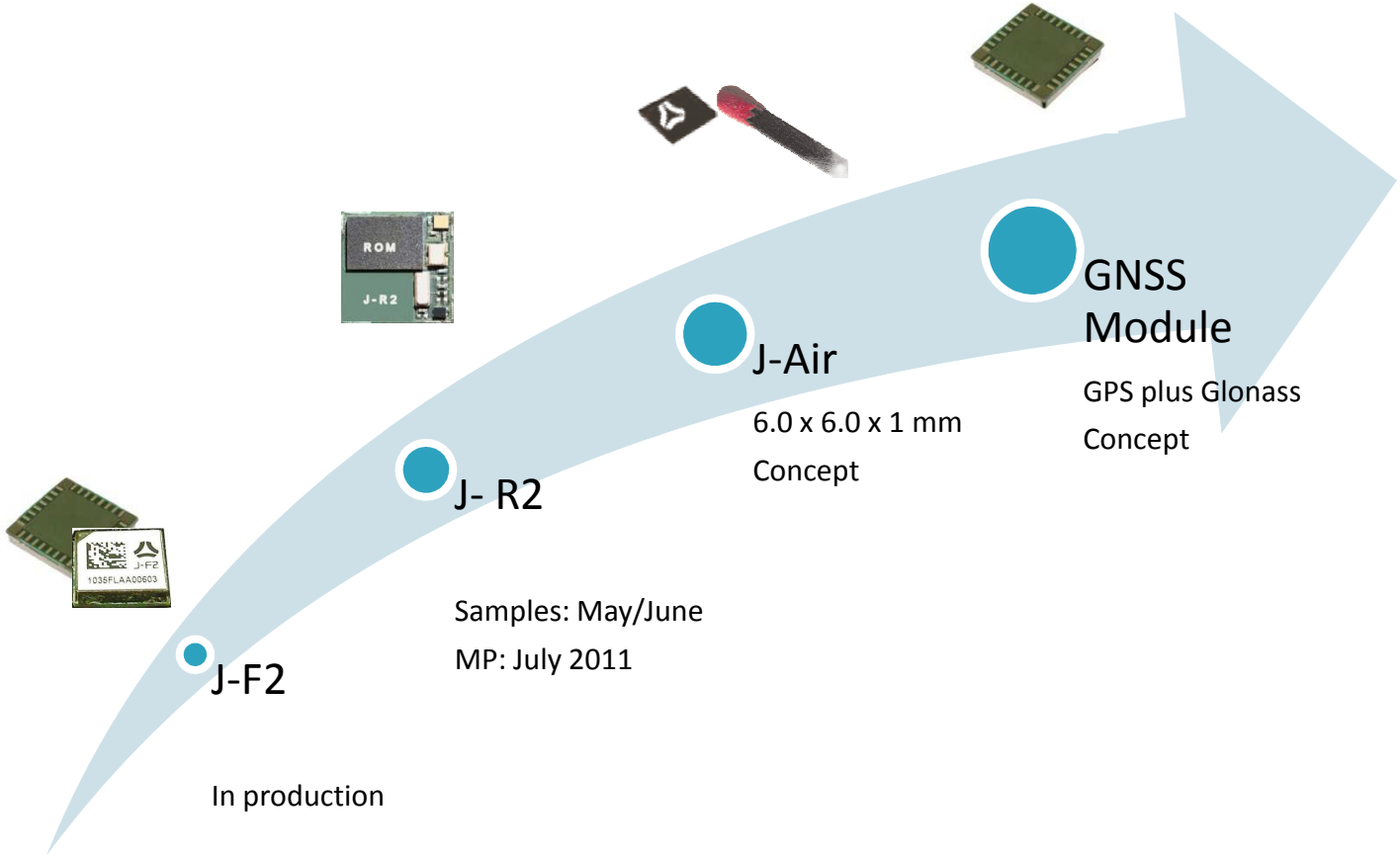
InstantFix features

Features	InstantFix Server Generated EE (SGEE)
Download Frequency	User dependent
Retrieval location	From server
Data validity	1-day, 3-day, 7-day and 14-day
Size of downloaded data	11kB per day

InstantFix features

Features	InstantFix Client Generated EE (CGEE)
Download Frequency	Generated from Broadcast ephemeris
Retrieval location	Generated from Broadcast ephemeris
Data validity	3 days
Size of downloaded data	

Jupiter Roadmap



Unique selling proposition

Application Areas/Verticals

People Tracking

Government/
Public Safety

Public Transport

Automotive

As well as Marine buoys, Weather balloons, Military applications, PNDs, Radar detectors, Fleet Tracking and many more.

OEM Customers

OEM Customer Applications

AVL/Fleet Management:

OHB TECHNOLOGY

DRIVECAM
TAKING RISK OUT OF DRIVING

Toll Collecting:

TOLL COLLECT
service on the road

DELPHI
Driving Tomorrow's Technology

People Tracking:

MI Medical Intelligence

serco

Animal/ Pet Tracking:

WHITE BEAR TECHNOLOGIES

ZUNIBAL S.A.
International Technology

Radiosondes:

GRAW
RADIOSONDES

Thrane & Thrane

Why Navman Wireless

Our expertise

- We are a global SIRF Partner with more than 20 Years experience
- Customizable Solutions
- Market leading GPS Manufacturer with more than 6Million users
- We sell to large OEMs and Automotive customers following the highest industry standards
- Seasoned Team
  (Rockwell, IBM, RFMD, Tele Atlas, SIRF, Conexant)

Your Benefit

- Dependable partner; free design reviews improve your solution
- Flexible; we listen to your needs
- Proven choice; no surprises
- Reliable; benefit from our stringent quality policy
- Open minded and experienced; we understand your business

Competitive Analysis – In House

Anti-Jamming Performance

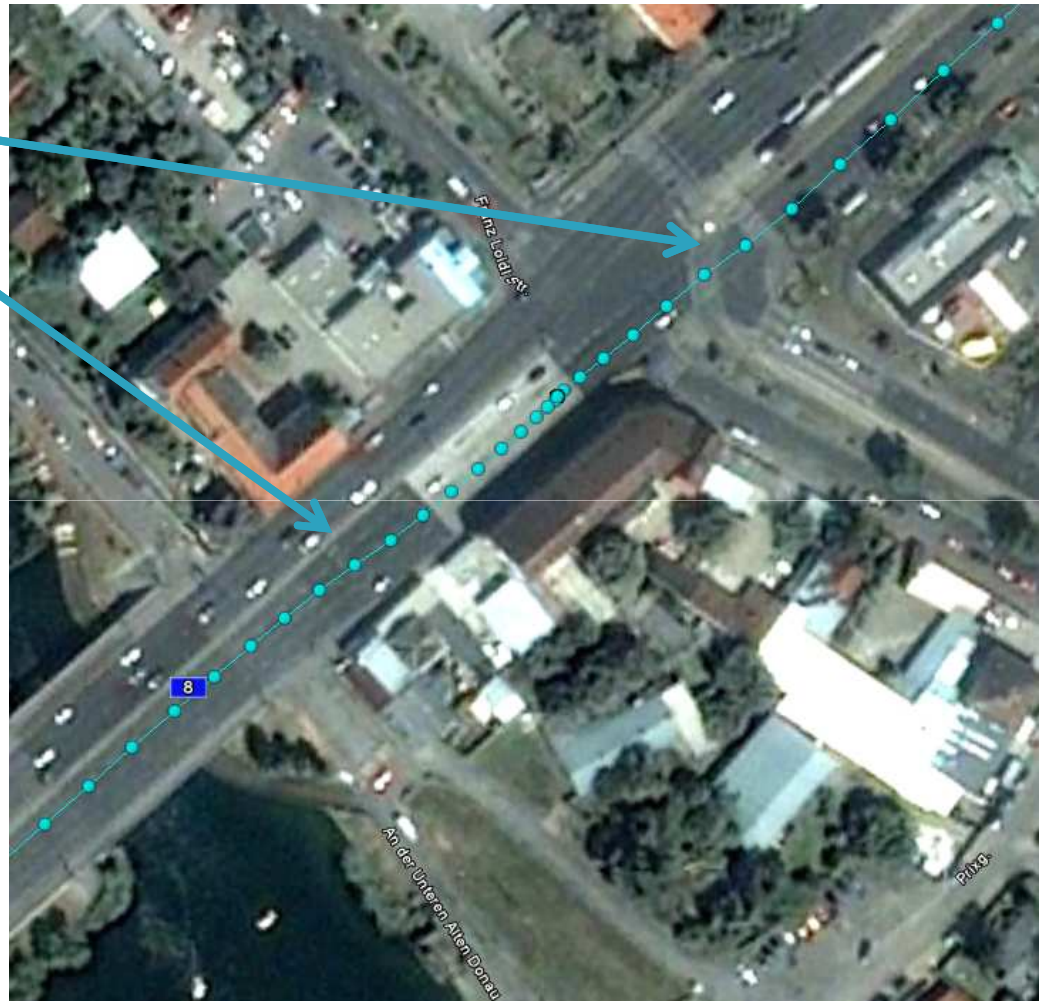
Movie showing the jamming immunity of J-N3

Leading Competitor against Jupiter ® J-N3

http://www.youtube.com/watch?v=cRDMfs8BbC0

Real Life Tests

Lane Changes



NAVMAN WIRELESS

Exact movements

Reacquisition on a train
after tunnel @ 140 km/h

Drive Tests: J-F2 vs J30DR

Run 1 (blue: J-F2; red: J30DR)

Run 2 (blue: J-F2; red: J30DR)

ANNEX

J3 Product Family

- J3: small size, lower cost

- J3-A: Antenna module

J^3 vs. J-F2

Features	J^3	J-F2
SiRFAware	X	a
Jammer Removal[1]	X	a
MEMS/I^2C	X	a
Client Generated Extended Ephemeris: InstantFixII[2]	X	a
Always ON	X	a

	J^3	J-F2
Autonomous Acquisition Sensitivity	-145 dBm	-148 dBm
Navigational Sensitivity	-157 dBm	-160 dBm
Tracking Sensitivity	-159 dBm	-163 dBm
Track Channels	20	48
Effective Correlators	~200,000	~400,000
Interfaces	UART	SPI/UART/I^2C

[1]Tracks up to 8 jammers and removes jammers prior to correlation.