

SatixFy IoT Brief

Satcom India

November 2021



Introduction to SatixFy

- Operating since 2011. ~220 people
- Technology investments of >\$150M
- Chips, products, antennas, system, Payloads
- DVB S2X/RCS II modem SDR ASICs and products
- Digital Beam Forming technology
- Electronically Steerable Multi-beam Antenna Array (ESMA) antennas
- OBP Payload technology and upcoming launch



In-House Silicon Capability & Expertise

Ground (terminals, hubs and gateways)



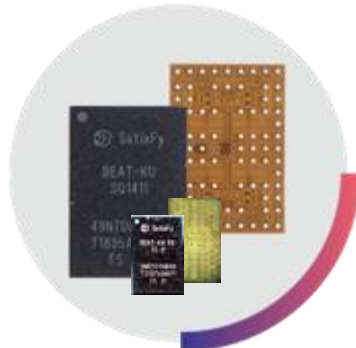
Sx3000

500MHz DVB-S2X
SDR Modem chip



Prime 1.0

True Time Delay
digital beamformer



Beat

Ku-band RFIC
Ka-band RFIC



Sx3099

1GHz DVB-S2X
8 SDR Modems chip

Space (satellite payloads)



Sx4000

Space grade
OBP Payload chip



Prime 2.0

Space grade
digital beamformer



SatixFy Edge Technology

New generation of silicon chips for modems, antennas and payloads

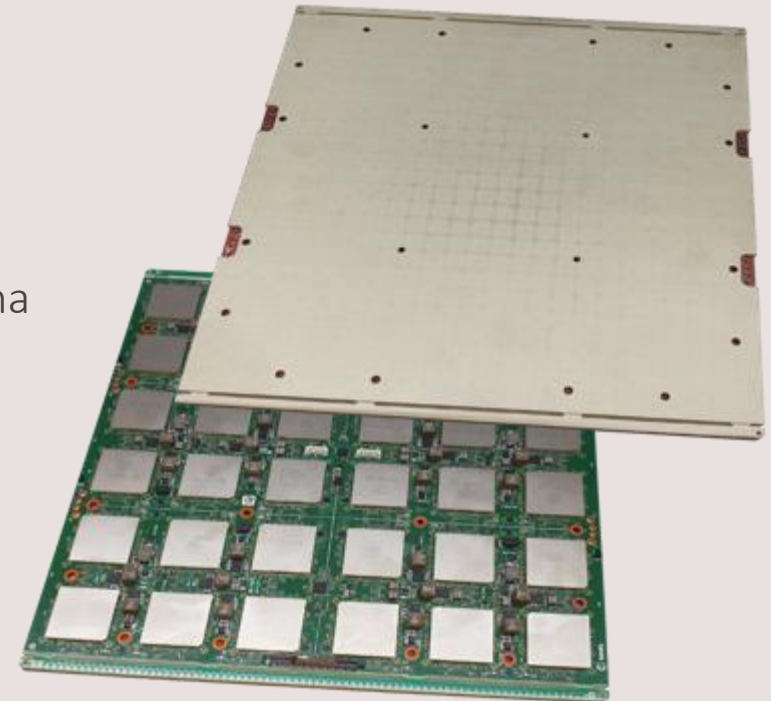
Technology leadership in broadband satellite modems

- Full wide-band **system on chip**
- **Software Design Radio (SDR)** for multi-network support and remote software download



New generation of advanced, digital, flat antennas

- **Multibeam and beam hopping** for MEO, LEO
- Full software control of antenna





Products



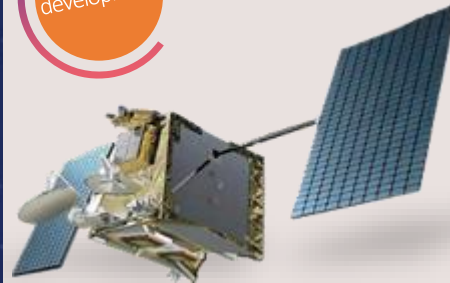
Broadband Modem

User terminal for enterprise & service providers with embedded self-developed ASIC and SDR capability



IoT/M2M Terminal

User terminal with modem & electronically steering antenna for services in global areas that have no terrestrial communication



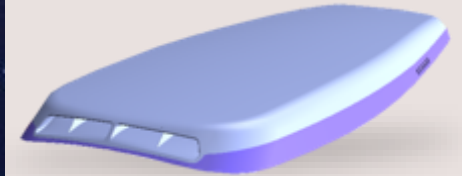
Satellite Payload

Payload for LEO constellations with beam hopping, regeneration and digital beam forming capabilities



COTM ESMA Terminal

User terminal embedding modem & electronically steering multibeam antenna



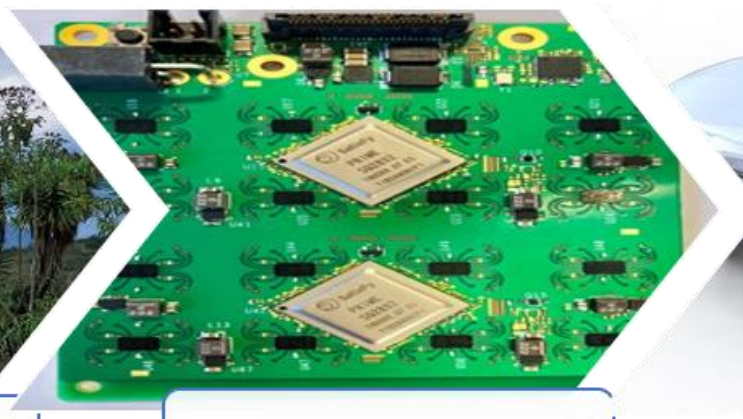
Inflight Connectivity (IFC) System

Broadband all-in-one terminal for commercial aircrafts and business jets

Changing the SCADA/M2M/IoT market



Traditional VSAT



Silicon Technology



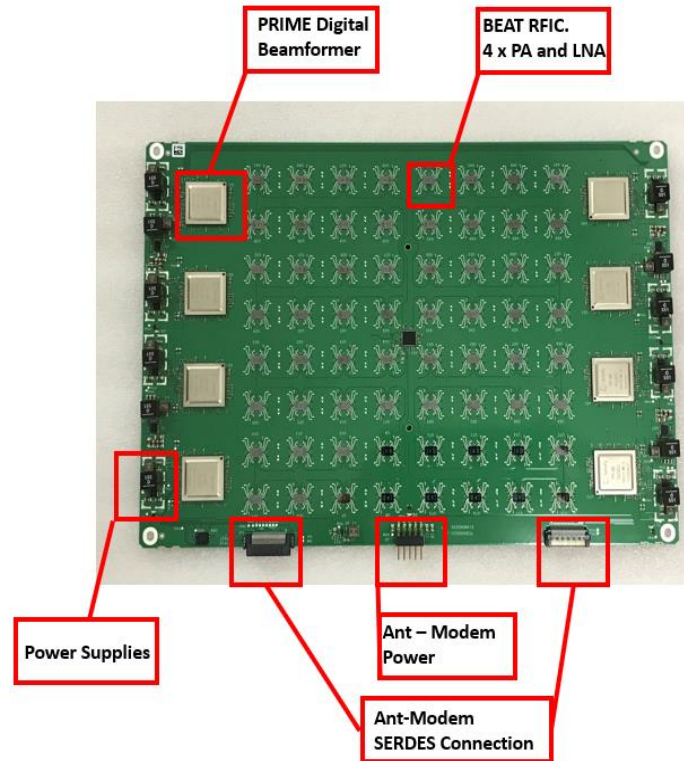
Satellite IoT

VSAT \$500 - \$1,000
 Installation \$200 - \$2,000
 Power solution ~\$1000-\$5,000
 Mechanics
 Fixed

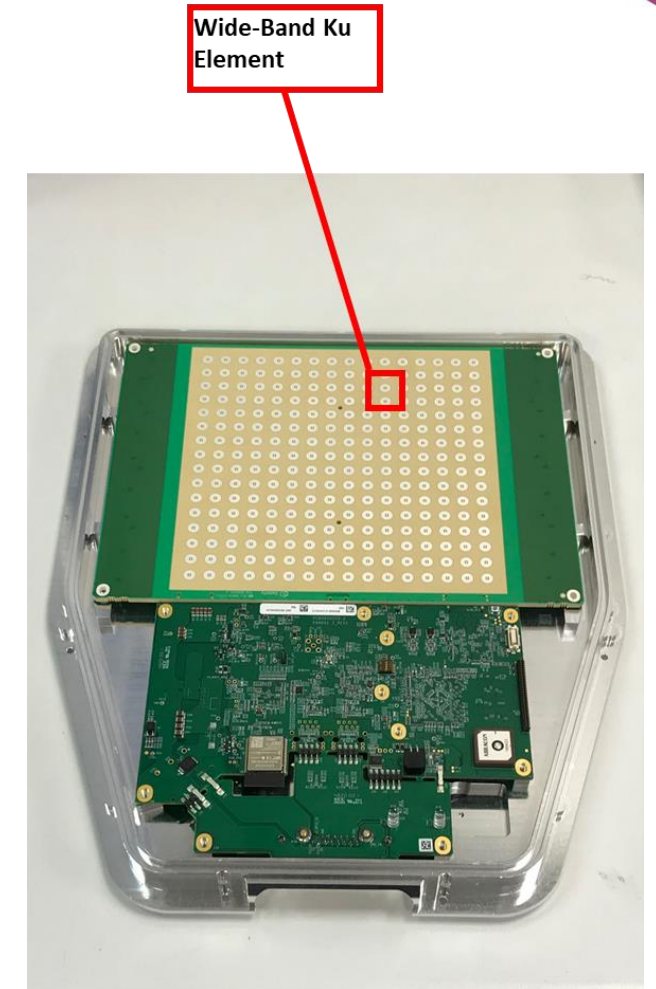
No installer
 Mobile or Fixed
 Low Power
 On board Edge processor
 <\$1,000

Ku-Band Satcom IoT

- One device combining
 - Electronic Tracking Antenna
 - Modem with Spread Spectrum
 - GPS, Gyro, Accelerometer, Compass
 - WiFi and Bluetooth



Antenna card - Bottom Part



Antenna card - Top Part

Generic Market Requirements

Typical Use Cases

- Fleet Management
- Control of long lines
- Access to Remote locations

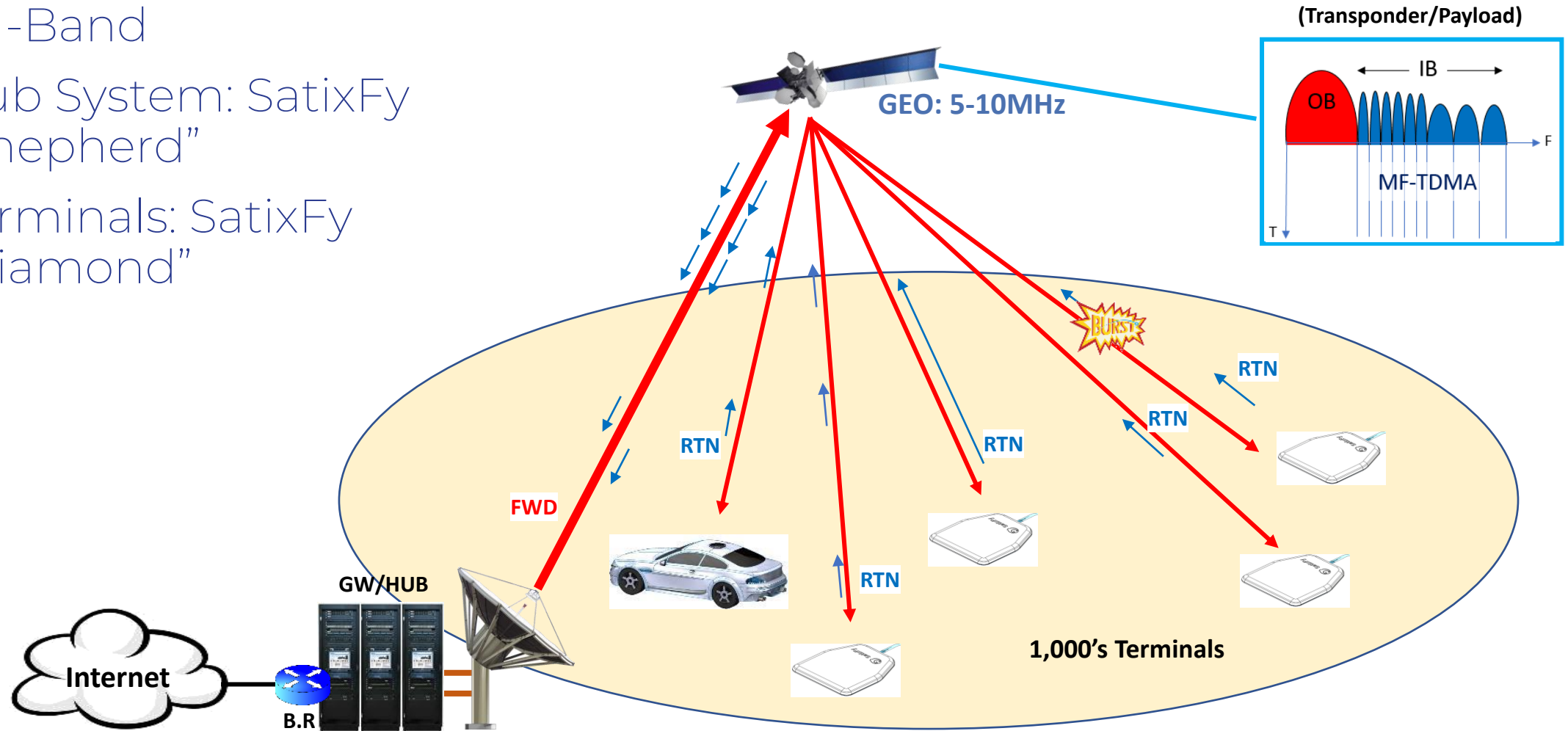
Typical needs

- Short Routine Mssg
- Emergency Mssg
- Voice (Technician, Driver)
- Online Access to/from
- Edge processing



SatixFy IoT System

- Ku-Band
- Hub System: SatixFy "Shepherd"
- Terminals: SatixFy "Diamond"



THANK YOU