

What Is Iridium NEXT?

- Fully replaces the current constellation and updates the ground system with new features and capabilities
- Retains 66 satellite LEO architecture supported by 6 in-orbit spares and 9 ground spares
- Scheduled deployment between early 2015 and 2017 via 8 Falcon 9 launches (9 SVs/launch)
- Significant advantages including expanded capacity, higher data speeds and ability to host payloads
- Deployment approach designed to provide service continuity



Current Constellation Health

| End-of Life Source | Status | Applicability to Iridium |
|--------------------------------|---|---------------------------------------|
| Expendables (e.g. propellants) | Fuel load in operational satellites expected to last until Iridium NEXT deployment | Unlikely |
| Wear-Out Mechanisms | Modeling indicates that component wear-out will not jeopardize constellation until at least 2017 | Eventually (but not in the near-term) |
| Radiation | Recent testing indicates that total dose radiation on key parts should not be an issue | Unlikely |
| Orbital Debris | New operational regimen deployed with U.S. Air Force to monitor all significant debris near current constellation | Unlikely |

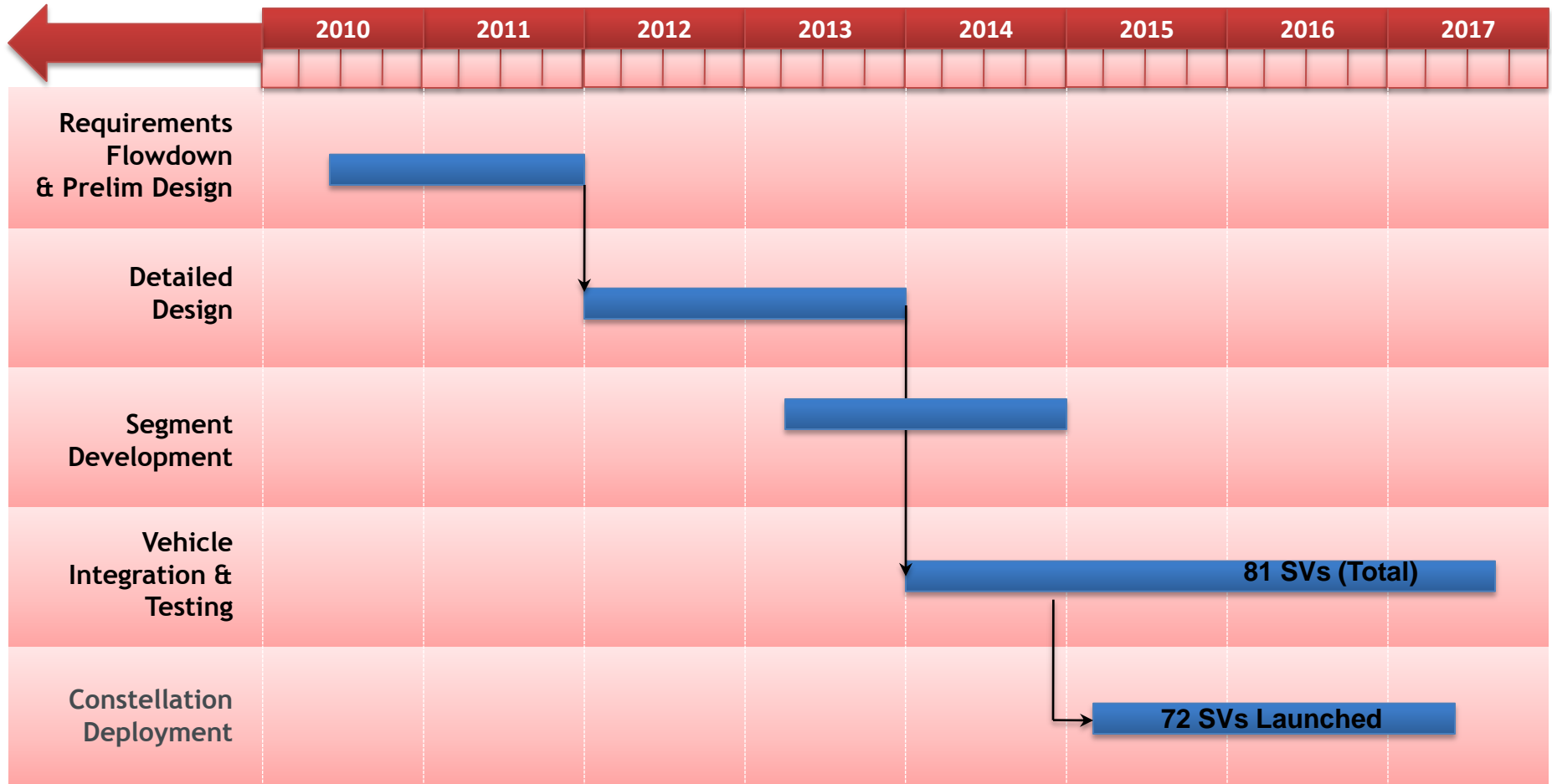
Iridium NEXT Service Phased Deployment Approach

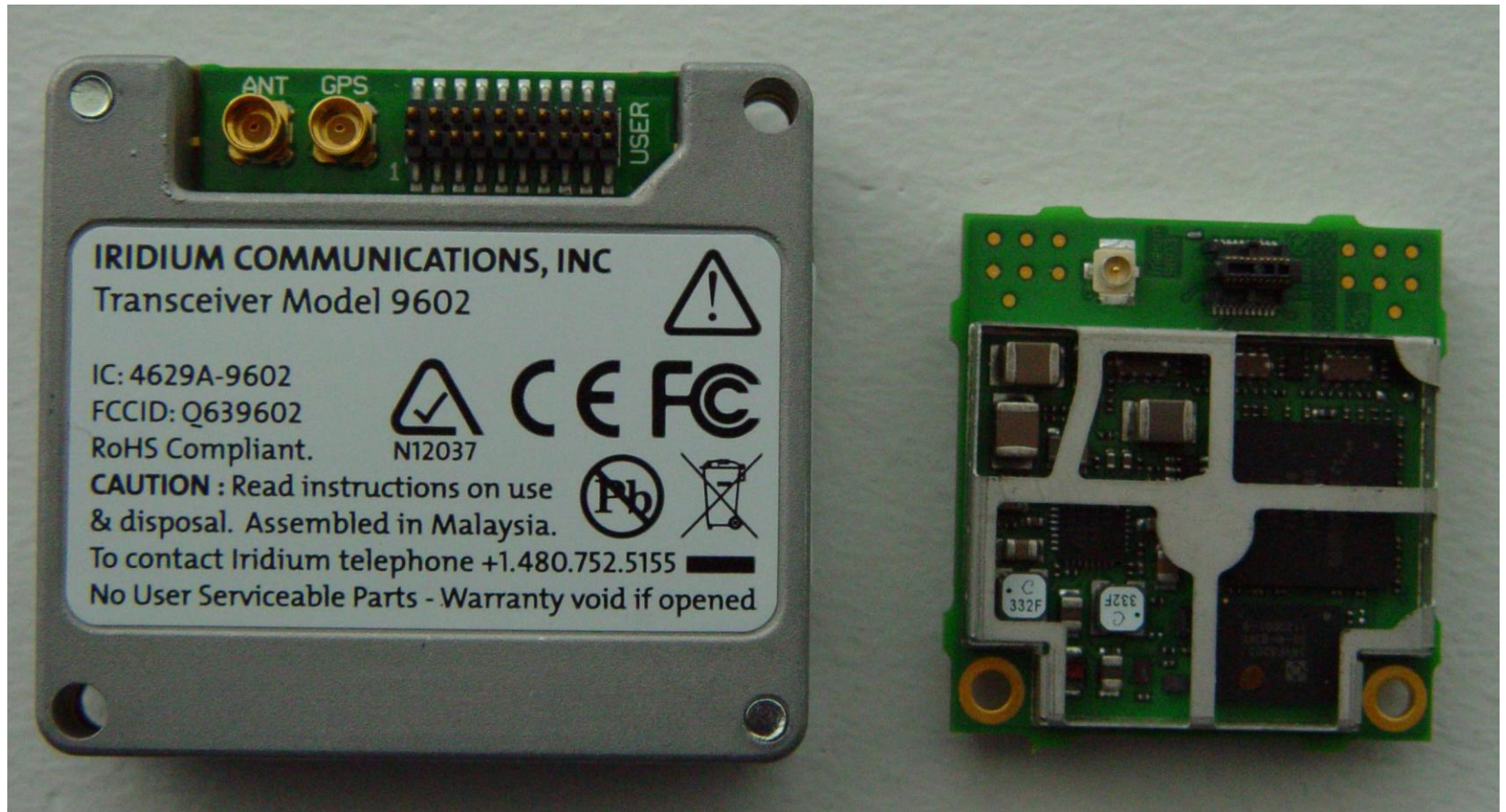
- Iridium NEXT satellites provide superior processing power compared to the current constellation -- 9x improvement in throughput and 125x improvement in memory capacity
- Many new service offerings can be provided due to enhanced processing capabilities including:
 - Higher quality voice
 - Expanded capacity and operational flexibility for M2M
 - High-Speed (up to 128 kbps to mobile class equipment) and Broadband (up to 1.5 Mbps to Iridium OpenPort class terminals)
 - Broadcast (undirected regional services at up to 64 kbps)
 - Ka-Band (>8 Mbps to fixed/transportable terminals)

Hosted Payload Opportunities

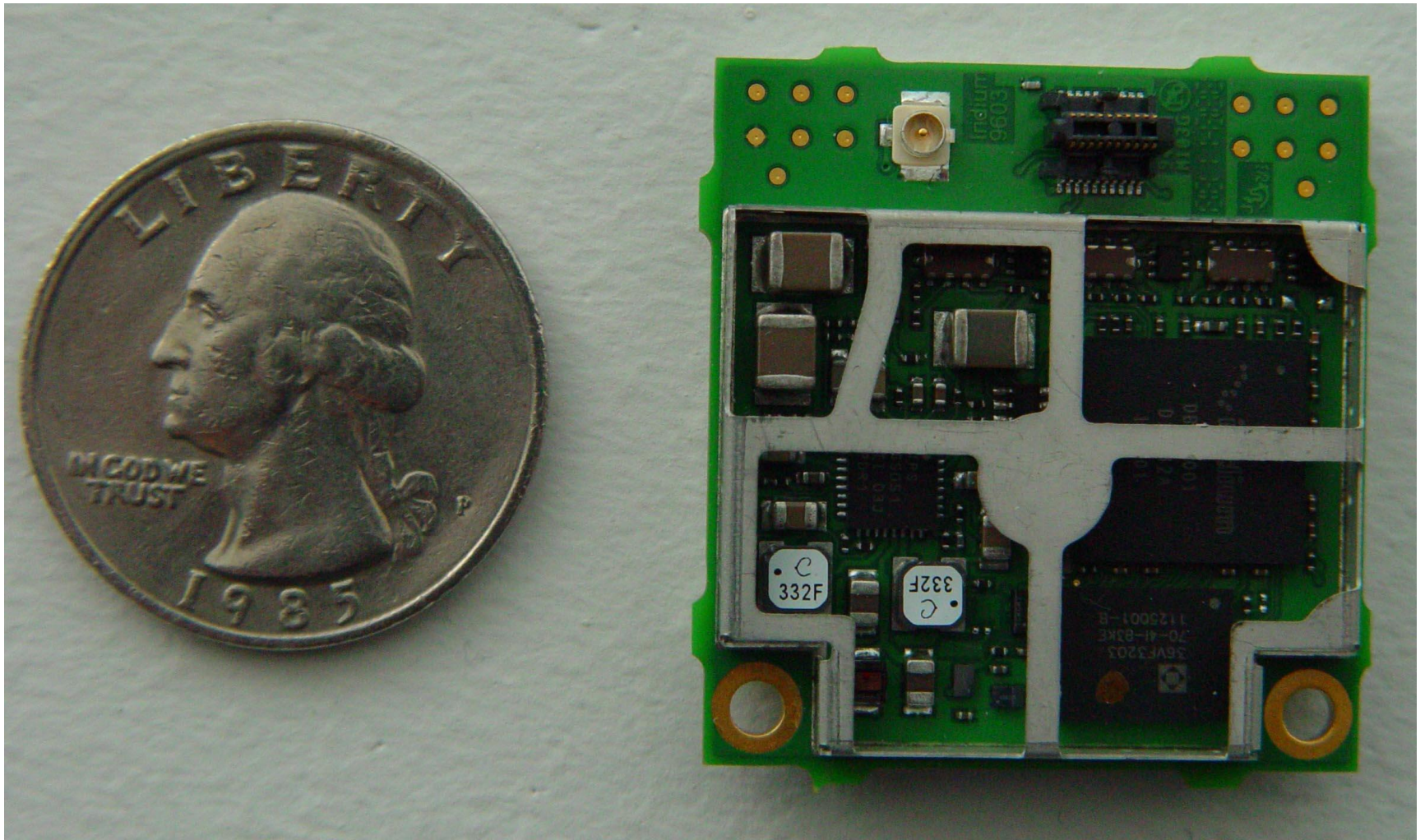
| Mission | Overview |
|--|---|
| US Government Mission | <ul style="list-style-type: none"> • Communications mission |
| US Government Mission | <ul style="list-style-type: none"> • Full 66 satellite mission using 20% of capacity |
| SensorPOD – Scientific Sensor Hosting Platform/NSF | <ul style="list-style-type: none"> • Fractional 5 Kg science missions (similar to cubesats) • Science community looking at combination of sensors on 66 satellites • Other customers assessing missions (NASA, USAF STP, ESA) |
| Global Air Traffic Monitoring Mission | <ul style="list-style-type: none"> • Commercially-financed program to sell aircraft tracking services to the FAA and others for air traffic control • Extension of existing FAA terrestrial ADS-B system for CONUS • Coverage of ocean routes, remote areas and developing nations |
| Weather Monitoring Mission – NOAA | <ul style="list-style-type: none"> • 6 sensor mission for operational weather sensor for atmospheric data • Continuation of NOAA COSMIC program |
| Space Debris Monitoring | <ul style="list-style-type: none"> • 6 sensor mission for monitoring space objects and debris • Input to USG space surveillance network |
| Other missions | <ul style="list-style-type: none"> • Various US Government missions • Magnetosphere monitoring • Ka band communications capability |

Iridium NEXT Development Schedule





Iridium 9602 SBD Transceiver



Iridium 9603 SBD Transceiver



NAL Research A3LA-RS Data Modem Based on 9523 Board and 9522 Modem