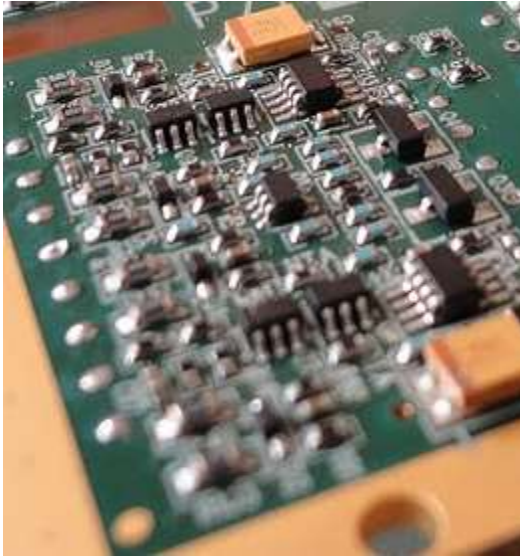


# MIL-STD-1553, H009 Transceiver Design



## DES1553XVR

MIL-STD-1553B/1760, H009

Discrete Components  
Transceiver Design

The World's most power efficient 1553 Transceiver

Compact, Robust, Reliable  
MIL-STD-IP-Cores

### Compatibility

#### Mil-Std-1553:

- MIL-STD-1553B Notice 2 and 1760
- RT Validated according to test plan from MIL-HDBK-1553A
- 1Mbps Data Rate
- Connects to any transformer

#### Other Protocols:

- Mil-Std-1760
- H009
- WB-194
- DIGIBUS

### Deliverables

- Schematics, in PDF format
- Bill of Materials
- PCB Layout instructions
- PCB Layout example
- User's manual

### More products from Sital:

- MIL-STD-1553 Components
- Mil-STD-1553 Boards
- MIL-STD-1553 Testers
- More IP Cores:
  - ARINC 429 IP Core
  - EBR 1553
  - H009, WB-194
  - CAN Bus

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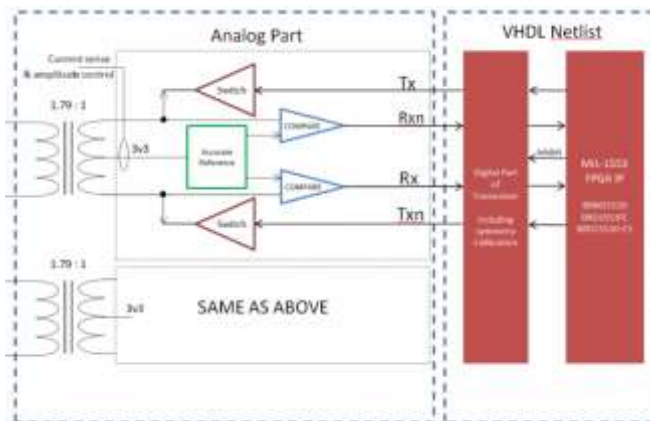
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### Key Features and Benefits

- **Low run-time cost** – The bill of Materials (BOM) cost is typically less than ¼ of a single component transceiver (~\$8-\$16 depending on quantities).
- **Low power** – The transmitter is built around a very efficient MOSFET gate. It is either on or off. When on, its resistance (Rds-on) is very low, thus the power it needs to dissipate is less than 0.15 watt. During receive the power is just a few milli-watts.
- **Multi-vendor sourcing** – The BOM is purchased by the end user and is composed of standard and common components.
- **PCB space optimization** – components can be placed with great flexibility on both sides of the PCB, and in places where a transceiver device would not fit. For example: Underneath the transformer.
- **Flexibility** – With a change in resistor values, the transceiver can serve other bus standards, such as the French Digibus.



DES1553XVR – size on PCB

Size (A+B) : 12x9 mm

The DES1553XVR transceiver design is an analog front-end interface solution developed by Sital Technology to interface between Sital's digital IP core and the MIL-STD-1553 transformer and bus.

It serves as an alternative to commonly available transceiver components.

In addition to Mil-Std-1553 the exact same design can support also protocols like H009, Mil-Std-1760, WB-194 and others.

Deployed by Many Customers:

Garmin, Raytheon, Boeing, NASA, Elbit Systems of America, IAI, Honeywell, NAI, CELESTICA, Thales

More information available at [www.sitaltech.com](http://www.sitaltech.com)

