



# MIL-STD-1553 ADVANCED INTEGRATED MUX (AIM) HYBRID

SEE ALSO USER'S GUIDE

### **DESCRIPTION**

DDC's BUS-61553 Advanced Integrated Mux (AIM) Hybrid is a complete MIL-STD-1553 Bus Controller (BC), Remote Terminal Unit (RTU), and Bus Monitor (MT) device. Packaged in a single 78-pin DIP package, the BUS-61553 contains dual low-power transceivers, complete BC/RT/MT protocol logic, a MIL-STD-1553-to-host interface unit and 8K x 16 RAM.

Using an industry standard dual transceiver and standard status and control signals, the BUS-61553 simplifies system integration at both the MIL-STD-1553 and host processor interface levels.

All 1553 operations are controlled through the CPU access to the

shared 8K x 16 RAM. To ensure maximum design flexibility, memory control lines are provided for attaching external RAM to the BUS-61553 address and data buses and for disabling internal memory; the total combined memory space can be expanded to 64K x 16. All 1553 transfers are entirely memory-mapped; thus the CPU interface requires minimal hardware and/or software support.

The BUS-61553 operates over the full military -55°C to +125°C temperature range. Available screened to MIL-PRF-38534, the BUS-61553 is ideal for demanding military and industrial microprocessor-to-1553 interface applications.

#### **FEATURES**

- Fully Intergrated Terminal Including:
  - -Dual Transceiver
  - -BC/RT/MT Protocol
  - -Memory Management Unit
  - -Processor Interface Logic
  - -8K x 16 RAM
- CMOS and Bipolar Technologies
- Internal Interrupt Status and Time Tag Registers
- High Reliability
- 883B Processing Available

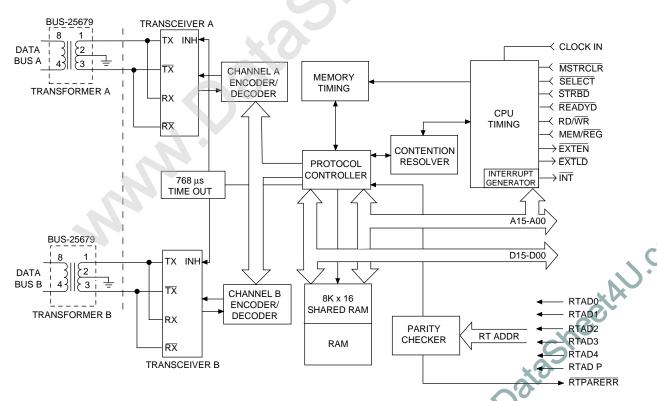


FIGURE 1. BU-61553 BLOCK DIAGRAM

## **ORDERING INFORMATION**

BUS-615XX-XX0X Supplemental Process Requirements: S = Pre-Cap Source Inspection L = Pull Test Q = Pull Test and Pre-Cap Inspection K = One Lot Date Code W = One Lot Date Code and PreCap Source Y = One Lot Date Code and 100% Pull Test Z = One Lot Date Code, PreCap Source and 100% Pull Test Blank = None of the Above **Process Requirements:** 0 = Standard DDC Processing, no Burn-In (See Page 13.) 1 = MIL-PRF-38534 Compliant 3 = MIL-PRF-38534 Compliant with PIND Testing 4 = MIL-PRF-38534 Compliant with Solder Dip 5 = MIL-PRF-38534 Compliant with PIND Testing and Solder Dip 6 = B\* with PIND Testing 7 = B\* with Solder Dip 8 = B\* with PIND Testing and Solder Dip 9 = Standard DDC Processing with Solder Dip, no Burn-In (See Page 13.) **Temperature Grade/Data Requirements:**  $1 = -55^{\circ}C$  to  $+125^{\circ}C$  $2 = -40^{\circ}\text{C} \text{ to } +85^{\circ}\text{C}$  $3 = 0^{\circ}C \text{ to } +70^{\circ}C$ 4 = -55°C to +125°C with Variables Test Data 5 = -40°C to +85°C with Variables Test Data 8 = 0°C to +70°C with Variables Test Data **Power Supply** 3 = -15 V Transceivers 4 = -12 V Transceivers 5 = +5 V Transceivers-Call Factory 6 = Transceivers-Use with BUS-63102II-Call Factory **Packaging** 

5 = DDIP

6 = Flat Pack

# **NOTES**

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Specifications are subject to change without notice.



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