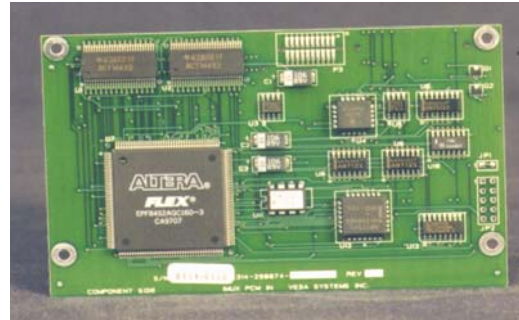


## 1553 Input/Output Submodules 1553-407-02 and 1553-408-02

### Features

- Transformer and Direct-coupled
- Up to 8 Channels per Quadraplex Card
- Up to 60 Channels per System
- Timing Accuracy's to 20 microseconds

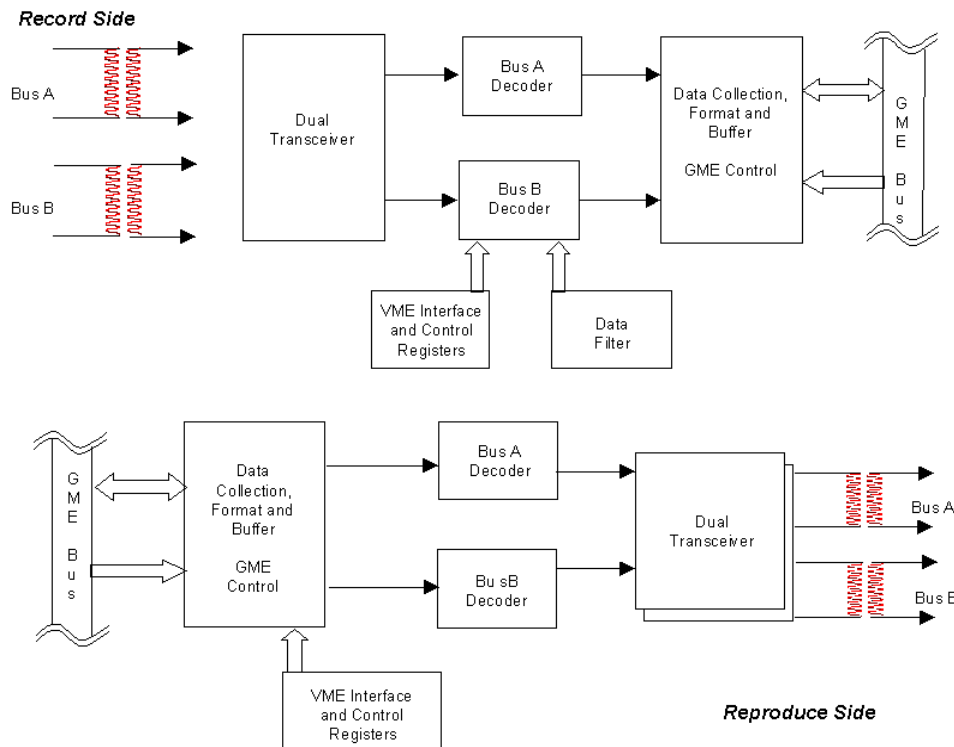


### Introduction

The 1553 Input and Output modules support the full 50,000 word/second data rates of MIL-STD-1553, A and B. The 1553 daughterboard interface cards plug into the Quadraplex board in both the airborne and laboratory chassis. Full software support is provided for both transformer-coupled and direct-coupled interfaces to the bus.

The MIL-STD-1553 input and output interface boards also support short-stub and long-stub coupling as well as the ability of filtering the data with subaddress and remote terminal-level label selection.

Up to 60 channels of MIL-STD-1553B with 20 microsecond timing accuracy are supported with the system architecture.



|                                       |   |   |
|---------------------------------------|---|---|
| <b>Inputs (407-02)</b>                | Sources                                 | Standard dual-redundant buses                               |
|                                       | Data Interface                          | Direct-coupled  |
|                                       |   | Transformer-coupled   |
|                                       |   | Short stub  |
|                                       |   | Long stub   |
|                                       | Signal Levels                           | 1.0V to 14.0V peak-to-peak, transformer coupled             |
|                                       |   | 1.4V to 20.0V peak-to-peak, direct-coupled                  |
| Input Codes                           | MIL-STD-1553B Manchester encoded stream |   |
| Operating Range/Card                  | 1 Mbps                                  |   |
| Operating Range/System                | Up to 512 Mbps                          |   |
| <b>Processing</b>                     | Data Selection                          | Selectable data by subaddress and/or remote terminal levels |
| <b>Outputs (408-02)</b>               | Sources                                 | Standard dual-redundant buses                               |
|                                       | Data Interface                          | Direct-coupled  |
|                                       |   | Transformer-coupled   |
|                                       |   | Short stub  |
|                                       |   | Long stub   |
|                                       | Signal Levels                           | 1.0V to 14.0V peak-to-peak, transformer coupled             |
|                                       |   | 1.4V to 20.0V peak-to-peak, direct-coupled                  |
| Output Codes                          | MIL-STD-1553B Manchester encoded stream |   |
| Operating Range/Card                  | 1 Mbps                                  |   |
| Operating Range/System                | Up to 512 Mbps                          |   |
| <b>Electrical &amp; Environmental</b> | Form Factor                             | Quadruplex submodule  |
|                                       | Connectors                              | Motherboard I/O   |
|                                       | Indicators                              | Channel active FIFO overflow                                |
|                                       | Operating Temperature                   | 32 °F - 158 °F (0 °C - 70 °C)                               |
|                                       | Storage Temperature                     | 14 °F - 185 °F (-10 °C - 85 °C)                             |
|                                       | Operating Altitude                      | 0 – 10,000 feet (0 – 3,100 meters)                          |
|                                       | Storage Altitude                        | -1,000 – 20,000 feet (-300 to 6,200 meters)                 |
|                                       | Humidity                                | 20 – 95% noncondensing                                      |