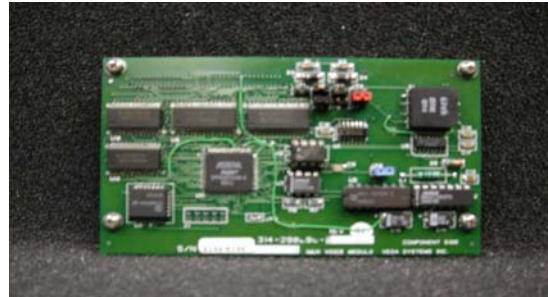


## IMUX Voice Input/Output Submodules VOIC-403/404

### Features

- Transformer-coupled Inputs and Outputs
- Up to  $\pm 5$  Volt Signal Input and Output
- Low Overhead
- Continuously Variable Slope Delta (CVSD) Modulation Technique



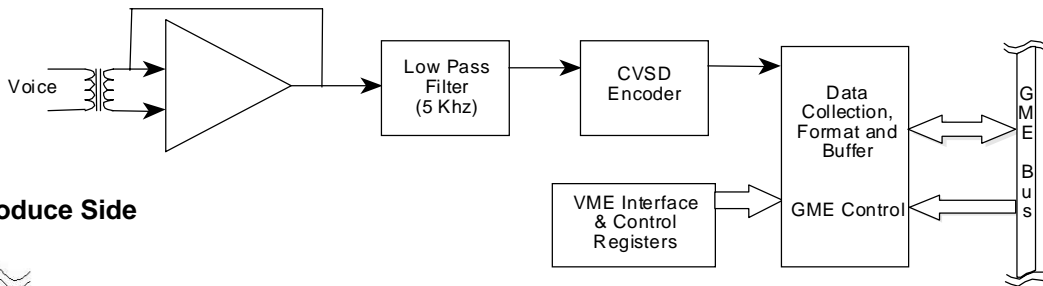
### Introduction

The Voice Input and Output modules support a wide array of single sources, such as range communications systems or airborne pilot voice logging. The VOIC-403 and VOIC-404 modules plug in to the Quadraplex card for complete flexibility. This motherboard/daughterboard architecture supports easy reconfiguration of the system including the voice interfaces.

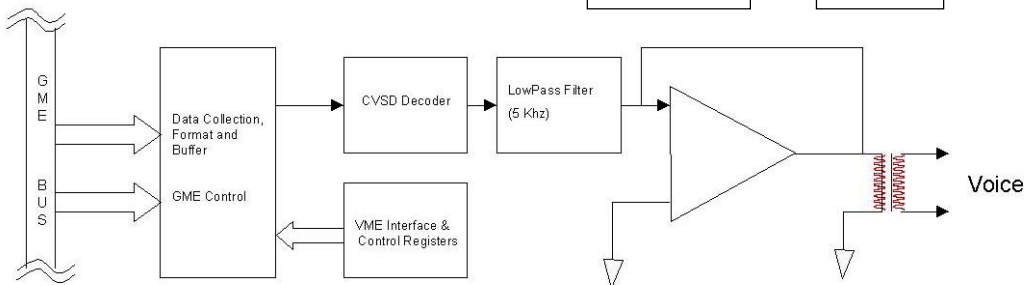
The input and output circuits are transformer-coupled to ensure external short-circuit protection while the input and output sampling have the dynamic range to handle faithful recording and reproduction of a wide range of signal levels.

Up to 60 of the Voice I/O modules can be supported in the system with ease of programming for all functions.

#### Record Side



#### Reproduce Side



|                                       |                         |   |
|---------------------------------------|-------------------------|---|
| <b>Inputs</b>                         | Sources                 | Single  |
|                                       | Data Source             | Analog signal                                       |
|                                       | Data Impedance          | 600 ohms  |
|                                       | Signal Levels           | ±5 volts  |
|                                       | Parallel Data Input     | 32-bit data, 8-bit tag to GME                       |
|                                       | Operating Range/Card    | 256 Kbps  |
|                                       | Operating Range/System  | Up to 512 Mbps                                      |
| <b>Processing</b>                     | Sampling Rate           | 9,000 min/64,000 max (programmable)                 |
|                                       | Sampling Type           | Continuously variable slope delta (CVSD) modulation |
|                                       | Status Bits             | System status error insertion                       |
| <b>Outputs</b>                        | Data Input              | 32-bit data, 8-bit tag from GME bus                 |
|                                       | Sources                 | Single  |
|                                       | Data Source             | Analog signal                                       |
|                                       | Data Impedance          | 600 ohms  |
|                                       | Signal Levels           | ±5 volts  |
|                                       | Parallel Data Input     | 32-bit data, 8-bit tag to GME                       |
|                                       | Operating Range/Card    | 256 Kbps  |
|                                       | Operating Range/Systems | Up to 512 Mbps                                      |
| <b>Electrical &amp; Environmental</b> | Form Factor             | Quadraplex submodule                                |
|                                       | Connectors              | Motherboard I/O                                     |
|                                       | Indicators              | Channel active and 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 – 6,200 meters)          |
| Humidity                              | 20 – 95% noncondensing  |   |
| <b>Order Codes</b>                    | VOIC-403                | Voice, Input  |
|                                       | VOIC-404                | Voice, Output                                       |