Reconfiguration and Fault Detection Unit (RFDU)

FA-8309

- Automatic (program controlled) reconfiguration for up to eight Input Output Processors (IOP's) and for fifteen Memory Modules (MM)
- Interprocessor interrupt enable/disable for up to eight IOP's
- Alarm on error with remote alarm capability
- Manual override switches for reconfiguration and interrupt disable registers
- Metronome clock for testing IOP real time clocks
- Provides single point start for synchronized system start
- Aids in performing fault isolation
Features

General
- Enhances failure recovery capabilities of Unisys IOP's
- Controlled by processors in the system through the IOP memory interface
- RFDU appears as memory bank 07 or 17 to the IOPs
- Provides automatic partitioning of processors and memory modules by means of eight 16-bit registers
- Up to 8 processors and 15 memory modules may be partitioned by the RFDU
- Processor controlled RFDU function codes
- Processor can read and store into the following RFDU Registers:
  - Status Register
  - Fault Data Register
  - Processor Interrupt Lockout Register
  - Reconfiguration Register
  - Matrix
- Manual override switches
  - Allows manual override for operator to disable an IOP/memory interface
  - One switch for each bit of the partitioning registers
  - Interprocessor interrupt enable/disable to each IOP
  - Provides a real time reference for checking IOP real time clocks
  - Local and remote alarm capability
  - Interfaces with one or two Central Memory Access (CMA) modules (FA-8311)
  - Interfaces with one or two solid state memories (SSM) (FA-10183)
  - Single point start switch for starting all processors in unison
  - Audible alarm adjustable from 1-5 seconds
  - Display Control Panel
    - Allows visual observation of the system
    - Manual control of system status
    - Indicates normal and abnormal system condition
    - Provides RFDU maintenance control and indicators

Physical
- The RFDU mounts in the front of a standard ARTS processor cabinet (FAA Type FA-8301) which allows convenient visual observation and access to the control panel
- Voltage: 120 VAC, single phase
- Amperes: 4.7 amps
- Power: 476 watts
- Frequency: 60 Hz
- Operating temperature: +50°F to 90°F
- Relative humidity: 20% to 90%
- Air supply comes from processor cabinet (FAA Type FA-8301)

Application
- Unisys IOP multiprocessor system failure recovery aid