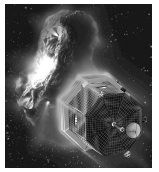


Florence Tan, Digital Electrical Engineer

FM CPU Electronics Progress 11/7/2000

Design complete

- NGIMS FC CPU (CPU, Watchdog timer, Memory, debug ports)
- 1553 spacecraft interface
- FC Analog interface (Microsequencer, DCON)

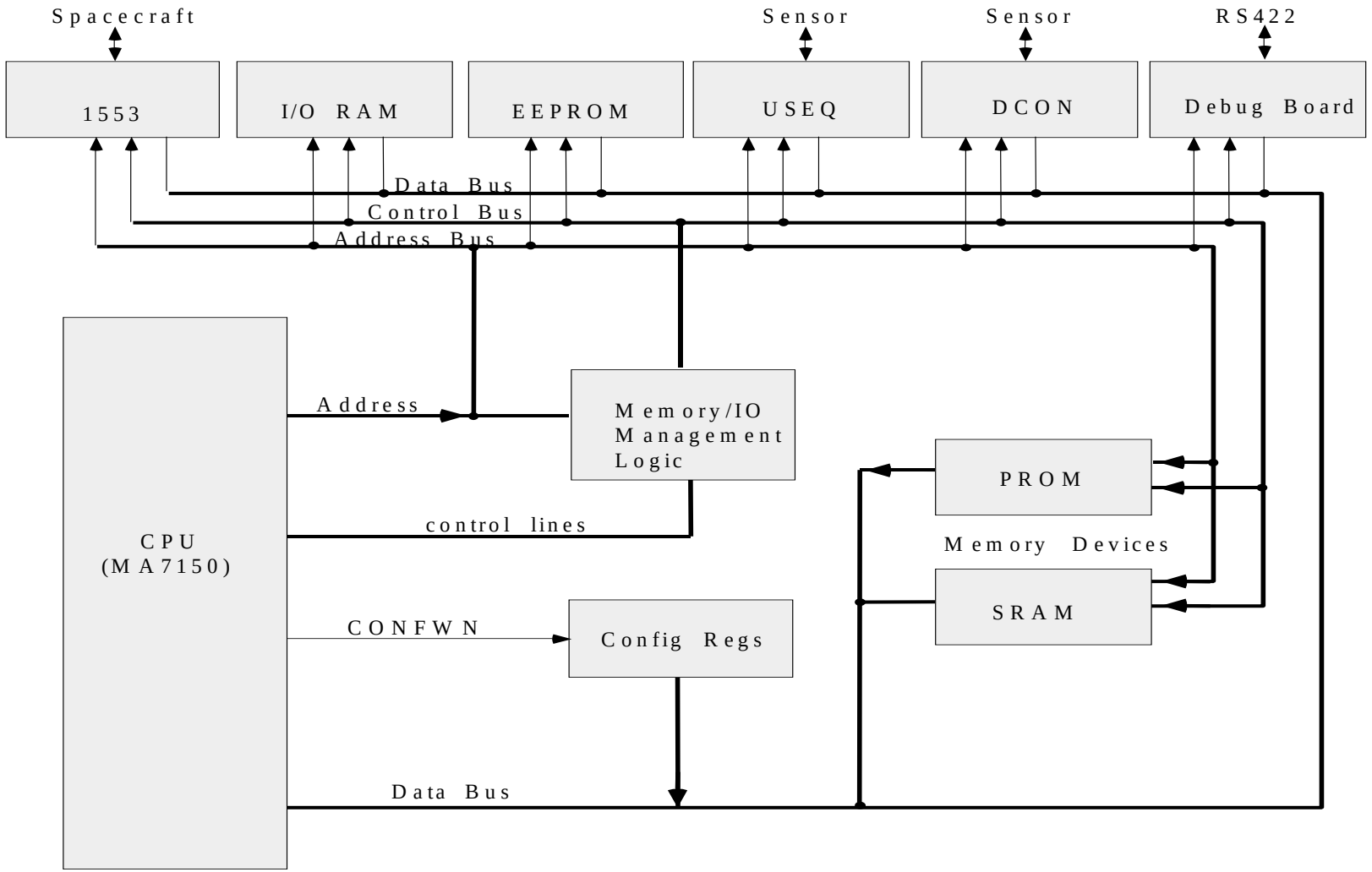
Procured all flight parts

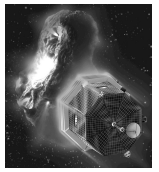
- Final Parts list reviewed and approved by parts engineer

Flight Model FM CPU board layout in progress

Florence Tan, Digital Electrical Engineer

BLOCK DIAGRAM





Florence Tan, Digital Electrical Engineer

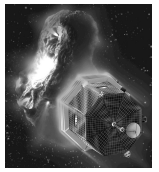
FM CPU Electronics Progress - Cont.

Testing

- Built, tested, verified NGIMS FC CPU
- Built, tested, and verified 1553 spacecraft interface using spacecraft simulator

Test Conditions

- Voltage 5 V, 4.5 V, 5.5 V
- Temperature 80 C, RT, -55 C Electronic board



Florence Tan, Digital Electrical Engineer

FM CPU Electronics Progress - Cont.

Integration testing with (KIWI test on 10/24-27):

- FC CPU Prototype Board
- FC Analog Prototype Board
- Motherboard Prototype
- Low Voltage Power Supply Prototype Board
- High Voltage A Power Supply Prototype Board
- Rod Bias Prototype Board