
* D I G I T A L *

INTEROFFICE MEMORANDUM

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to: Jupiter Project Leaders

subject: Jupiter APA TASKS

1.0 SCOPE

This document will estimate the tasks and resources required to design, build and debug the Jupiter APA prototype.

2.0 GENERAL

The Jupiter APA will occupy a 10 slot backpanel in a single width cabinet previously designed by the LSG Technology Group. It is anticipated that 9 modules will be designed, with ample spares on each. The APA accelerates instructions which perform poorly in the EBOX, in particular the floating-point instruction set.

3.0 TASKS

APA tasks will be alphabetic designators and numeric skill levels as follows:

CATAGORIES (1ST ALPHABETIC CHARACTER)

S = SIMULATION
L = MGMT & TECHNICAL LEADERSHIP
D = DESIGN
R = RAMP
B = BUILD
T = TEST/DEBUG

SKILL LEVELS

8-10 = MANAGER, CONSULTING ENGINEER
7-9 = PRINCIPAL ENGINEER
6-8 = SENIOR ENGINEER
5-7 = DESIGN ENGINEER
4-6 = JR DESIGN ENGINEER, ENGINEERING CANDIDATE
3-5 = PROJECT TECHNICIAN
2-4 = TECHNICIAN
1-3 = ASSEMBLER

SIMULATION TASKS

| | | |
|-------|---------------------------------------|--------------|
| SA-8 | = ARCHITECTURE SIMULATION | 60 man-days |
| SI-10 | = FUNCTIONAL INTERFACE SIMULATION | 30 man-days |
| SF-10 | = FUNCTIONAL ALGORITHM SIMULATION | 60 man-days |
| SP-7 | = PERFORMANCE SIMULATION | 30 man-days |
| SR-8 | = FUNCTIONAL REG XFER SIMULATION | 80 man-days |
| SD-8 | = DIAGNOSTIC SIMULATION | 50 man-days |
| SG-5 | = GATE-LEVEL SIMULATION, VERIFICATION | 180 man-days |
| ST-5 | = TIMING VERIFICATION | 180 man-days |

LEADERSHIP TASKS

LM-10 = ENGINEERING PROJECT MANAGEMENT
LS-7 = TASK AND RESOURCE SCHEDULING
LT-9 = TECHNICAL DIRECTION

DESIGN TASKS

DS-8 = DESIGN SPECIFICATION
DP-9 = DESIGN PARTITIONING
DB-7 = BLOCK DIAGRAMS
DM-6 = MODULE DESIGN
DL-6 = PHYSICAL PLACEMENT
DF-5 = MECHANICAL AND FRAME DESIGN DONE
DV-6 = POWER DESIGN DONE
DC-6 = COOLING DESIGN DONE

RAMP TASKS

RS-8 = ERROR DET, ISOLATION, RECOVERY SPEC
RI-9 = HARDWARE INITIALIZATION SPEC
RD-7 = 11-BASED DIAGNOSTICS
RB-8 = DEBUG BOOTSTRAPS AND AIDS
RR-7 = RAMP ISSUE REVIEW
RT-5 = TECHNOLOGY REVIEW

BUILD TASKS

BB-4 = BACKPANEL ROUTE
BR-3 = MULTIWIRED ROUTE
BV-3 = MULTIWIRED VENDOR PREP
BP-2 = PARTS ORDER
BB-2 = BUILD & STUFF
BF-3 = BUILD FRAME AND POWER

TEST TASKS

TR-3 = MODULE REWORK
TB-7 = LOGIC DESIGN DEBUG
TE-4 = ECO IMPLEMENTATION
TD-6 = DESIGN ECO