

# Timing IRM Activities

*Test point analysis*

Thu, May 8, 1997

Using the signals that appear on the test points connector on the IRM front panel, the following timing measurements were collected.

	<i>Assembly version</i>		<i>Metroworks "C" version</i>	
<i>Interrupt Activities</i>				
	$\mu s$		$\mu s$	
100 Hz Tick	9		9	
Serial	11		18	
150 Hz motor step	2	35 w/motor	7	50 w/motor
Ethernet	60	32-60 typ	70	40-70 typ
14469 console I/O				
Arcnet				
15 Hz cycle	52		75	
1553 interface				
A/D scan	5		6	
Clock event	9		12	
<i>Task Activities</i>				
	$\mu s$		$\mu s$	
Classic	300		375	
Alarms	1100		1500	
Console	70		110	
Application page	105	450 w/mDump	140	600 w/mDump
Small Memory Dump	75		100	
Date/Time	75		80	
Update	1600	2200 w/PageG	2000	2900 w/PageG
Queue Monitor	50		80	
Server	55	185 w/request	75	250 w/request
Serial	100		120	
Acnet	85		110	
DZero				
RETDAT	275		425	
SNAP (IP support)	175		250	

## *Specific test conditions*

### Serial Interrupt and Serial Task

Send S-record file to target IRM over serial port

### Classic Task

Issue request for 16 bytes of memory datausing Page R.

### Application Page Task

Use PageG to set index page, memory dump page showing \$F00 local memory.

### Small Memory Dump

Use PageG from Macintosh, view 8 bytes at \$788.

### Update

First with nothing active, then with PageG request active. "Nothing active" will include the usual suite of local applications:

ARPZ	ARP Table Initialization
AAUX	Acnet Auxiliary functions
FTPM	Fast Time Plot Manager for Acnet
ECHO	UDP Echo Server
REQM	Request Monitor
TFTP	Trivial File Transfer Protocol
DNSQ	Domain Name Server Query
SLOG	Setting Logger for Acnet
DBDL	Database download for Acnet

### Server

First with nothing active, then with Macintosh parameter page request for one channel from another node via target node as server.

### Acnet and RETDAT and SNAP Tasks

Send Acnet RETDAT request via Page L repeatedly.