

516-67
 MAS
 5/18/72

Node Format For PDP-11

Write command to DR11-B

MSB	1	2	3	4	5	6	7	12	13	16	LSB
	DSTAT A	DSTAT B	DSTAT C	R/W	ATTN	Prime	Spares	Node Mask Reg			

Write Data to DR11-B

MSB	1	16	LSB
	DI 15	...	DI 0

Read Data From DR11-B

MSB	1	16	LSB
	DØ 15	...	DØ 0

Read Status From DR11-B

MSB	1	6	7	8	9	10	11	16	LSB	
	FNCT 3	FNCT 2	FNCT 1	READY	BUSY	INIT	X	X	Node Status	Device Name

Node wc ⇒ DSTAT A,B,C - Device Status Bits A,B, C for the PDP-11

Node wc ⇒ R/W - READ/WRITE, R=1 W=0

Node wc ⇒ ATTN - ATTENTION, forces a PDP-11 Interrupt

Node wc ⇒ PRIME - causes a Cycle Request if R=1

PDP-11 ⇒ DI - DATA Input from 516 to PDP-11

PDP-11 ⇒ DØ - DATA Output from PDP-11 to 516

PDP-11 ⇒ FNCT 1,2,3 - Function Bits 1,2,3, Set by PDP-11 GO command

PDP-11 ⇒ INIT - Initialize - Resets interface logic

- PRIME - Setting this signal high forces a cycle request loading the DRDB register in the DR11-B. This primes the DRDB register for an initial read.
- ATTN - Stops further bus cycles in DR11-B when set high. Interrupt occurs if IE bit in DRST is set.
- R/W - Specifies type of Unibus cycle to be performed by DR11-B.
- 516 Node Write = C1 = 0 ⇒ DATI (CO=0)
- 516 Node Read = C1 = 1 ⇒ DATO (CO=0)
- FNCT 1,2,3, (LSB → MSB) - derived from function bits, 1,2,3 in DRST of DR11-B and used to specify device operation.
- READY - True after INIT; false when GO bit is loaded indication being a command has been given; true again when word count overflows or error condition develops. Causes a Read Status Interrupt in Node/Device Interface.
- BUSY - Indicates bus cycle in progress.
- INIT - True whenever Unibus initialized on power up, power down, console start, RESET instruction, or interlock error.
- GO - Go causes the loading of the Command-Status register in the DR11-B, this also causes a Node Read Status Interrupt.