

/// REMOVED FROM IOTS,52,E,EXEC15 MIGHT BE USEFUL SOMEDAY FOR SUE
 LADR=721041 RQWD=720141 RQIO=720441
 STWD=720341 NACK=722041

/DISPATCHER IOT FOR PDP=70S

DTCL, LAC I RSTAT
 DAP DTSTAT /16 BIT STAT PTR
 LAC I (DCH 70) /USER AC
 SZF I 7
 JMP DTRL5 /IOT+0,RELEASE
 SZF 6
 JMP DTGET /IOT+1,GET
 NACK
 NOP /CLEAR POSSIBLE ERROR
 SZF 5
 JMP DTHANG /IOT+2,HANG UNTIL WORD CHANGES
 DZM TV2
 DAP TV2 /AC POINTS TO 3 WORD BLOCK
 LAC I TV2
 SPA
 JMP I ILGIOT
 SZA I
 JMP I R2
 DAP DTNUM /NUMBER OF WORDS (1=40)
 SUB (40)
 SZM
 JMP I ILGIOT
 IDX TV2
 LIO I TV2 /PROCESSOR,7=CORE
 IDX TV2
 LAW 7777
 AND I TV2 /USER CORE AREA
 DAC TV2
 SUB (40)
 SPA
 JMP I ILGIOT
 SZF 4
 JMP DTSTOR /IOT+4,PUT DATA IN 7=CORE
 LSM
 LADR /MUST BE GET DATA FROM 7=CORE
 JMP DTR1
 RQWD /REQUEST 1ST WORD
 JMP DTR1
 LAW I 1
 ADD DTNUM
 DAP DTNUM
 SAD (LAW I)
 JMP DTONE /ONLY 1 WORD WANTED
 DTNUM, LAW I
 DAC TV3
 RQIO"U"RQWD /LOOP TO GET WORDS
 JMP DTR1
 DIO I TV2
 IDX TV2
 ISP TV3
 JMP .-5

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DTONE,

RGIO
JMP DTR1
ESM
DIO I TV2
JMP I R2

DTSTOR,

JSP DTOWN

/MUST BE OWNED

LSM
LADR
JMP DTR1
XCT DTNUM
DAC TV3
LIO I TV2
STWD

/LOOP TO SEND TO 7=CORE

JMP DTR1
IDX TV2
ISP TV3
JMP .+5
NOP
NACK

JMP DTR1
ESM
JMP I R2
ESM
JMP I R1

DTR1,

DTHANG,

LIO I (DCH 72)

/MUST BE OWNED

JSP DTOWN
IDX I (DCH 71)
DAC TV2

LSM
LADR
JMP DTR1
RQWD

JMP DTR1
LAW 20
DIP I DTSTAT
CLA
DAP I (15)

RGIO
JMP DTR1

XAI

SZA

JMP DTR1

/WORD DIFFERENT, RETURN NOW

LAW 10
ADD DTOWN2
DAP .+1

DIO :

/SAVE CONTENTS

SUB (4)

DAP .+3

LAC I (DCH 72)

AND (377777)

DAC :

JMP I DELAY

/FALL INTO "DELAY" IOT IN CORE 14

DTGET,

RAL 38
AND (3) /GET OWNERSHIP OF A PROCESSOR
ADD (DCH I OWN)
DAC TV2
LAC I TV2
SAD DTSTAT
JMP I R2
SZA
JMP I R1
LAC DTSTAT
DAC I TV2
JMP I R2

DTRLs,

SPA /RELEASE OWNERSHIP
CLA"U"STF 1 /AC NEG, RELEASE ALL PROCESSORS OWNED

DTRLs2,

RAL 38
AND (3)
ADD (DCH I OWN)
DAC TV2
LAC I TV2
SAD DTSTAT
DZM I TV2
SZF I 1
JMP I R1
IDX TV2
SAS (DCH I OWN+4)
JMP DTRLs2
JMP I R1

DTOWN,

DAP DTOWX
LAI
RAL 38
AND (3)
ADD (OWN)
DAP ,+1

DTOWN2,

LAC .
SAS DTSTAT
JMP I ILGIOT
JMP .

DTOWX,

DTSTAT,
TV2,
TV3,

DCH .
0
0

OWN,

0 /16 BIT STAT PTR
0
0
0
=0 /PROC+ADR IF WAITING
=0
=0
=0
0 /CONTENTS IF WAITING
0
0
0

/INTERRUPT FROM A PDP-7

TELINT, IDX TELNUM
 LAW OWN

DAP TEL2

TEL2, LIO .

SNI

JMP TEL3

/NOT OWNED

ADD (4)

DAP ,+1

LIO .

SPI I

JMP TEL4

/OWNED AND WAITING, GO UNHANG IF CHANGED

TEL3, IDX TEL2

SAS (LIO OWN+4)

JMP TEL2

NACK

NOP

/DON'T LEAVE TIMING ERROR AROUND

JMP I TELEXIT

TEL4, DAP TEL7

NACK

NOP

LADR

JMP TEL5

RQWD

JMP TEL5

ADD (4)

DAP TEL6

NOP

RQIO

JMP TEL5

LAI

TEL6, SAD .

/HAS IT CHANGED ?

JMP TEL3

/NOPE

TEL5, XCT TEL2

LAI

LSM

SAD I BDSTAT

LAC FSTAT

DAC TV1

LAW I 7777

AND I TV1

LIA

AND (LAC)

SWP

/AC(STATUS) IO(NONZERO IF TYIHNG ETC.)

SAD (CLKHNG)

JMP ,+3

SNI I

JMP TEL8

LAW 3

/TO QUE 3 IF CLKHNG OR RUNNABLE OR USING IOP

DAP I TV1

SNI I

DIP I TV1

/CHANGE CLKHNG TO RUNNABLE

DZM I HOTFLG

TEL8, ESM

CLC

TEL7, DAC .

JMP TEL3

TV1, 0

TELNUM, 0

/COUNT INTERRUPTS