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000000  PPPPPPPP  DDDDDDDD  EEEEEEEEE  FFFFFFFF
000000  PPPPPPPP  DDDDDDDD  EEEEEEEEE  FFFFFFFF
00      00  PP      PP  DD      DD  EE      FF
00      00  PP      PP  DD      DD  EE      FF
00      00  PP      PP  DD      DD  EE      FF
00      00  PP      PP  DD      DD  EE      FF
00      00  PPPPPPPP  DD      DD  EEEEEEEEE  FFFFFFFF
00      00  PPPPPPPP  DD      DD  EEEEEEEEE  FFFFFFFF
00      00  PP      DD      DD  EE      FF
00      00  PP      DD      DD  EE      FF
00      00  PP      DD      DD  EE      FF
00      00  PP      DD      DD  EE      FF
000000  PP      DDDDDDDD  EEEEEEEEE  FF
000000  PP      DDDDDDDD  EEEEEEEEE  FF

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SSSSSSSS  DDDDDDDD  LL
SSSSSSSS  DDDDDDDD  LL
SS      DD      DD  LL
SS      DD      DD  LL
SS      DD      DD  LL
SS      DD      DD  LL
SSSSSS  DD      DD  LL
SSSSSS  DD      DD  LL
SS      DD      DD  LL
SS      DD      DD  LL
SS      DD      DD  LL
SS      DD      DD  LL
SSSSSSSS  DDDDDDDD  LLLLLLLLLL
SSSSSSSS  DDDDDDDD  LLLLLLLLLL

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{ Version: 'V04-000'

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{ MODULE: OPDEF.MDL (This structure will eventually be moved to STARDEF)

{ FACILITY: Any component desiring opcode numerical equivalences

{ ABSTRACT:

 This module defines a series of symbols of the form OPS_opcode where each symbol has a value equal to the numerical equivalent of instruction "opcode".

{ HISTORY:

 AUTHOR: Lawrence J. Kenah

 CREATION DATE: 18 May 1981

 MODIFICATIONS:

{--

```
( Instruction opcode numerical equivalences
(
( This set of constant definitions allows tables to be built that contain
( numerical equivalents for the instruction opcodes. Each symbol has a
( prefix of OPS_ to insure that these symbols are not used in a context
( for which they were not designed
(
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( NOTE: ALL OPCODE VALUES ARE IN HEXADECIMAL
```

```
module $OPDEF;
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constant HALT equals 0 prefix OP tag $;
constant NOP equals 1 prefix OP tag $;
constant REI equals 2 prefix OP tag $;
constant BPT equals 3 prefix OP tag $;
constant RET equals 4 prefix OP tag $;
constant RSB equals 5 prefix OP tag $;
constant LDPCTX equals 6 prefix OP tag $;
constant SVPCTX equals 7 prefix OP tag $;

constant CVTPS equals %X8 prefix OP tag $;
constant CVTSP equals %X9 prefix OP tag $;
constant INDEX equals %XA prefix OP tag $;
constant CRC equals %XB prefix OP tag $;
constant PROBER equals %XC prefix OP tag $;
constant PROBEW equals %XD prefix OP tag $;
constant INSQUE equals %XE prefix OP tag $;
constant REMQUE equals %XF prefix OP tag $;

constant BSBB equals %X10 prefix OP tag $;
constant BSB equals %X10 prefix OP tag $;
constant BRB equals %X11 prefix OP tag $;
constant BNEQ equals %X12 prefix OP tag $;
constant BNEQU equals %X12 prefix OP tag $;
constant BEQL equals %X13 prefix OP tag $;
constant BEQLU equals %X13 prefix OP tag $;
constant BGTR equals %X14 prefix OP tag $;
constant BLEQ equals %X15 prefix OP tag $;
constant JSB equals %X16 prefix OP tag $;
constant JMP equals %X17 prefix OP tag $;

constant BGEO equals %X18 prefix OP tag $;
constant BLSS equals %X19 prefix OP tag $;
constant BGTRU equals %X1A prefix OP tag $;
constant BLEQU equals %X1B prefix OP tag $;
constant BVC equals %X1C prefix OP tag $;
constant BVS equals %X1D prefix OP tag $;
constant BGEOU equals %X1E prefix OP tag $;
constant BCC equals %X1E prefix OP tag $;
constant BLSSU equals %X1F prefix OP tag $;
constant BCS equals %X1F prefix OP tag $;

constant ADDP4 equals %X20 prefix OP tag $;
constant ADDP equals %X20 prefix OP tag $;
constant ADDP6 equals %X21 prefix OP tag $;
constant SUBP4 equals %X22 prefix OP tag $;
```



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constant CVTBF equals %X4C prefix OP tag $:
constant CVTWF equals %X4D prefix OP tag $:
constant CVTLF equals %X4E prefix OP tag $:
constant ACBF equals %X4F prefix OP tag $:

constant MOVF equals %X50 prefix OP tag $:
constant CMPF equals %X51 prefix OP tag $:
constant MNEGF equals %X52 prefix OP tag $:
constant TSTF equals %X53 prefix OP tag $:
constant EMODF equals %X54 prefix OP tag $:
constant POLYF equals %X55 prefix OP tag $:
constant CVTFD equals %X56 prefix OP tag $:
/* RESERVED 57

constant ADAWI equals %X58 prefix OP tag $:
/* RESERVED 59
/* RESERVED 5A
/* RESERVED 5B
constant INSQHI equals %X5C prefix OP tag $:
constant INSQTI equals %X5D prefix OP tag $:
constant REMQHI equals %X5E prefix OP tag $:
constant REMQTI equals %X5F prefix OP tag $:

constant ADDD2 equals %X60 prefix OP tag $:
constant ADDD equals %X60 prefix OP tag $:
constant ADDD3 equals %X61 prefix OP tag $:
constant SUBD2 equals %X62 prefix OP tag $:
constant SUBD equals %X62 prefix OP tag $:
constant SUBD3 equals %X63 prefix OP tag $:
constant MULD2 equals %X64 prefix OP tag $:
constant MULD equals %X64 prefix OP tag $:
constant MULD3 equals %X65 prefix OP tag $:
constant DIVD2 equals %X66 prefix OP tag $:
constant DIVD equals %X66 prefix OP tag $:
constant DIVD3 equals %X67 prefix OP tag $:

constant CVTDB equals %X68 prefix OP tag $:
constant CVTDW equals %X69 prefix OP tag $:
constant CVTDL equals %X6A prefix OP tag $:
constant CVTRDL equals %X6B prefix OP tag $:
constant CVTBD equals %X6C prefix OP tag $:
constant CVTWD equals %X6D prefix OP tag $:
constant CVTLD equals %X6E prefix OP tag $:
constant ACBD equals %X6F prefix OP tag $:

constant MOVD equals %X70 prefix OP tag $:
constant CMPD equals %X71 prefix OP tag $:
constant MNEGD equals %X72 prefix OP tag $:
constant TSTD equals %X73 prefix OP tag $:
constant EMODD equals %X74 prefix OP tag $:
constant POLYD equals %X75 prefix OP tag $:
constant CVTDF equals %X76 prefix OP tag $:
/* RESERVED 77

constant ASHL equals %X78 prefix OP tag $:
constant ASHQ equals %X79 prefix OP tag $:

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constant EMUL equals ZX7A prefix OP tag $:
constant EDIV equals ZX7B prefix OP tag $:
constant CLRD equals ZX7C prefix OP tag $:
constant CLRG equals ZX7C prefix OP tag $:
constant MOVQ equals ZX7D prefix OP tag $:
constant MOVAQ equals ZX7E prefix OP tag $:
constant MOVAD equals ZX7E prefix OP tag $:
constant MOVAG equals ZX7E prefix OP tag $:
constant PUSHAQ equals ZX7F prefix OP tag $:
constant PUSHAD equals ZX7F prefix OP tag $:
constant PUSHAG equals ZX7F prefix OP tag $:

constant ADDB2 equals ZX80 prefix OP tag $:
constant ADDB equals ZX80 prefix OP tag $:
constant ADDB3 equals ZX81 prefix OP tag $:
constant SUBB2 equals ZX82 prefix OP tag $:
constant SUBB equals ZX82 prefix OP tag $:
constant SUBB3 equals ZX83 prefix OP tag $:
constant MULB2 equals ZX84 prefix OP tag $:
constant MULB equals ZX84 prefix OP tag $:
constant MULB3 equals ZX85 prefix OP tag $:
constant DIVB2 equals ZX86 prefix OP tag $:
constant DIVB equals ZX86 prefix OP tag $:
constant DIVB3 equals ZX87 prefix OP tag $:

constant BISB2 equals ZX88 prefix OP tag $:
constant BISB equals ZX88 prefix OP tag $:
constant BISB3 equals ZX89 prefix OP tag $:
constant BICB2 equals ZX8A prefix OP tag $:
constant BICB equals ZX8A prefix OP tag $:
constant BICB3 equals ZX8B prefix OP tag $:
constant XORB2 equals ZX8C prefix OP tag $:
constant XORB equals ZX8C prefix OP tag $:
constant XORB3 equals ZX8D prefix OP tag $:
constant MNEGB equals ZX8E prefix OP tag $:
constant CASEB equals ZX8F prefix OP tag $:

constant MOVB equals ZX90 prefix OP tag $:
constant CMPB equals ZX91 prefix OP tag $:
constant MCOMB equals ZX92 prefix OP tag $:
constant BITB equals ZX93 prefix OP tag $:
constant CLRB equals ZX94 prefix OP tag $:
constant TSTB equals ZX95 prefix OP tag $:
constant INCB equals ZX96 prefix OP tag $:
constant DECB equals ZX97 prefix OP tag $:

constant CVTBL equals ZX98 prefix OP tag $:
constant CVTBW equals ZX99 prefix OP tag $:
constant MOVZBL equals ZX9A prefix OP tag $:
constant MOVZBW equals ZX9B prefix OP tag $:
constant ROTL equals ZX9C prefix OP tag $:
constant ACBB equals ZX9D prefix OP tag $:
constant MOVAB equals ZX9E prefix OP tag $:
constant PUSHAB equals ZX9F prefix OP tag $:
```

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constant ADDW2 equals XXA0 prefix OP tag $:
constant ADDW equals XXA0 prefix OP tag $:
constant ADDW3 equals XXA1 prefix OP tag $:
constant SUBW2 equals XXA2 prefix OP tag $:
constant SUBW equals XXA2 prefix OP tag $:
constant SUBW3 equals XXA3 prefix OP tag $:
constant MULW2 equals XXA4 prefix OP tag $:
constant MULW equals XXA4 prefix OP tag $:
constant MULW3 equals XXA5 prefix OP tag $:
constant DIVW2 equals XXA6 prefix OP tag $:
constant DIVW equals XXA6 prefix OP tag $:
constant DIVW3 equals XXA7 prefix OP tag $:

constant BISW2 equals XXA8 prefix OP tag $:
constant BISW equals XXA8 prefix OP tag $:
constant BISW3 equals XXA9 prefix OP tag $:
constant BICW2 equals XAAA prefix OP tag $:
constant BICW equals XAAA prefix OP tag $:
constant BICW3 equals XXAB prefix OP tag $:
constant XORW2 equals XXAC prefix OP tag $:
constant XORW equals XXAC prefix OP tag $:
constant XORW3 equals XXAD prefix OP tag $:
constant MNEGW equals XXAE prefix OP tag $:
constant CASEW equals XXAF prefix OP tag $:

constant MOVW equals XXB0 prefix OP tag $:
constant CMPW equals XXB1 prefix OP tag $:
constant MCOMW equals XXB2 prefix OP tag $:
constant BITW equals XXB3 prefix OP tag $:
constant CLRW equals XXB4 prefix OP tag $:
constant TSTW equals XXB5 prefix OP tag $:
constant INCW equals XXB6 prefix OP tag $:
constant DECW equals XXB7 prefix OP tag $:

constant BISPSW equals XXB8 prefix OP tag $:
constant BICPSW equals XXB9 prefix OP tag $:
constant POPR equals XXBA prefix OP tag $:
constant PUSHR equals XXBB prefix OP tag $:
constant CHMK equals XXBC prefix OP tag $:
constant CHME equals XXBD prefix OP tag $:
constant CHMS equals XXBE prefix OP tag $:
constant CHMU equals XXBF prefix OP tag $:

constant ADDL2 equals XXC0 prefix OP tag $:
constant ADDL equals XXC0 prefix OP tag $:
constant ADDL3 equals XXC1 prefix OP tag $:
constant SUBL2 equals XXC2 prefix OP tag $:
constant SUBL equals XXC2 prefix OP tag $:
constant SUBL3 equals XXC3 prefix OP tag $:
constant MULL2 equals XXC4 prefix OP tag $:
constant MULL equals XXC4 prefix OP tag $:
constant MULL3 equals XXC5 prefix OP tag $:
constant DIVL2 equals XXC6 prefix OP tag $:
constant DIVL equals XXC6 prefix OP tag $:
constant DIVL3 equals XXC7 prefix OP tag $:
```


The image displays a grid of 100 small panels, each containing technical diagrams, code snippets, and data tables. The panels are arranged in a 10x10 grid. Some panels have larger text labels such as "STARDEFLL SDL", "OPCDEF SDL", "SCRDEF SDL", "SRMDEF SDL", "STARDEFMP SDL", and "STARDEFQZ SDL". The diagrams include flowcharts, block diagrams, and data structures. The code snippets appear to be assembly or system-level code. The data tables consist of columns of numbers and text. The overall appearance is that of a technical manual or a reference document for digital equipment.