

--file P5ADefs.mesa edited by Sweet May 10, 1978 11:50 AM

DIRECTORY

AltDefs: FROM "altodefs" USING [BYTE],
 CodeDefs: FROM "codedefs" USING [BDOComponentNames, BDOIndex, CCIndex, CodeCCIndex, CodeChunkType, Co
 **mpareClass, EXLRIndex, FullBitAddress, JumpType, LabelCCIndex, Lexeme, StkIndex, TempStateRecord],
 SymDefs: FROM "symdefs" USING [ContextLevel, CSEIndex, ISEIndex, recordCSEIndex, SEIndex],
 TreeDefs: FROM "treedefs" USING [TreeLink];

DEFINITIONS FROM AltDefs, SymDefs, CodeDefs, TreeDefs;

P5ADefs: DEFINITIONS = BEGIN

-- from foftable.mesa

PushEffect: PROCEDURE [b: [0..256]] RETURNS [[0..3]];
 PopEffect: PROCEDURE [b: [0..256]] RETURNS [[0..7]];
 NumberOfParams: PROCEDURE [b: [0..256]] RETURNS [[0..3]];
 MinimalStack: PUBLIC PROCEDURE [b: [0..256]] RETURNS [BOOLEAN];

-- from address.mesa

AddressInit: PROCEDURE;
 Cload: PROCEDURE [r: BDOIndex];
 Cstore: PROCEDURE [r: BDOIndex];
 FieldParam: PROCEDURE [BDOIndex] RETURNS [WORD];
 GetFrame: PROCEDURE [r: BDOIndex];
 addfulladdrtohits: PROCEDURE [f: FullBitAddress, b: CARDINAL] RETURNS [rf: FullBitAddress];
 copyBDOItem: PROCEDURE [r: BDOIndex] RETURNS [rr: BDOIndex];
 genBDOItem: PROCEDURE RETURNS [r: BDOIndex];
 loadaddress: PROCEDURE [r: BDOIndex] RETURNS [CARDINAL];
 loadlexaddress: PROCEDURE [l: Lexeme] RETURNS [CARDINAL];
 loadseiaddress: PROCEDURE [sei: ISEIndex] RETURNS [CARDINAL];
 loadtsonaddress: PROCEDURE [t: TreeLink] RETURNS [CARDINAL];
 loadtsonchars: PROCEDURE [t: TreeLink, nchars: CARDINAL];
 makeBDOItem: PROCEDURE [l: Lexeme] RETURNS [bdo Lexeme];
 makeTOSaddrBDOItem: PROCEDURE [psize: CARDINAL] RETURNS [r: BDOIndex];
 makeTOSlex: PROCEDURE [nwords: CARDINAL] RETURNS [bdo Lexeme];
 makeretlex: PROCEDURE [nwords, psize: CARDINAL] RETURNS [Lexeme];
 maketempaddrBDOItem: PROCEDURE [tllex: Lexeme] RETURNS [r: BDOIndex];
 maketsonBDOItem: PROCEDURE [t: TreeLink] RETURNS [bdo Lexeme];
 pstorelex: PROCEDURE [wordoffset, nwords: CARDINAL];
 pushcomponent: PROCEDURE [t: BDOComponentNames, r: BDOIndex];
 releaseBDOItem: PROCEDURE [r: BDOIndex];
 rmakeBDOItem: PROCEDURE [l: Lexeme] RETURNS [BDOIndex];
 storelex: PROCEDURE [l: ContextLevel, wordoffset, nwords: CARDINAL];

--from calls.mesa

Csyscall: PROCEDURE [alpha: BYTE];
 Csyscalln: PROCEDURE [alpha: BYTE, n: CARDINAL];
 Csyserror: PROCEDURE;
 LogHeapFree: SIGNAL [calltree: TreeLink] RETURNS [BOOLEAN, se Lexeme];

--from code.mesa

P5module: PROCEDURE;
 P5Error: PROCEDURE [n: CARDINAL];
 ACStackOverflow: SIGNAL;
 ACStackUnderflow: SIGNAL;
 StackNotEmptyAtStatement: SIGNAL;
 CodeNotImplemented: SIGNAL;
 DeletingUnreachableCode: SIGNAL;
 CodePassInconsistency: SIGNAL;

--from driver.mesa

AllocCodeCCItem: PROCEDURE [n: [0..3]] RETURNS [c: CodeCCIndex];
 bitsforoperand: PROCEDURE [t: TreeLink] RETURNS [CARDINAL];
 bitsfortype: PROCEDURE [sei: SEIndex] RETURNS [CARDINAL];
 ccalloc: PROCEDURE [t: CodeChunkType];
 Ciout0: PROCEDURE [i: BYTE];
 Ciout1: PROCEDURE [i: BYTE, p1: WORD];
 Ciout2: PROCEDURE [i: BYTE, p1, p2: WORD];
 Ciout3: PROCEDURE [i: BYTE, p1, p2, p3: WORD];
 Cmodule: PROCEDURE;
 computeframesize: PROCEDURE [fs: CARDINAL] RETURNS [CARDINAL];
 Coutjump: PROCEDURE [jt: JumpType, l: LabelCCIndex];
 createlabel: PROCEDURE RETURNS [c: LabelCCIndex];
 deletecell: PROCEDURE [c: CCIndex];
 labelalloc: PROCEDURE RETURNS [c: LabelCCIndex];

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maketreeliteral: PROCEDURE [val: WORD] RETURNS [TreeLink];
nextvar: PROCEDURE [sei: ISEIndex] RETURNS [ISEIndex];
operandtype: PROCEDURE [t: TreeLink] RETURNS [sei: CSEIndex];
ParamCount: PROCEDURE [c: CodeCCIndex] RETURNS [CARDINAL];
popinvals: PROCEDURE [irecord: recordCSEIndex, isenable: BOOLEAN];
prevvar: PROCEDURE [ssei, sei : ISEIndex] RETURNS [ISEIndex];
ReleaseLock: PROCEDURE;
RequireStack: PROCEDURE [n: INTEGER];
treeliteral: PROCEDURE [t: TreeLink] RETURNS [BOOLEAN];
treeliteralvalue: PROCEDURE [t: TreeLink] RETURNS [WORD];
wordsforoperand: PROCEDURE [t: TreeLink] RETURNS [n: CARDINAL];
wordsforsei: PROCEDURE [sei: SEIndex] RETURNS [CARDINAL];

--from flow.mesa
Cfin: PROCEDURE [t: TreeLink, tf: BOOLEAN, label: LabelCCIndex];
Cflow: PROCEDURE [t: TreeLink, tf: BOOLEAN, label: LabelCCIndex];
CompareFn: PROCEDURE [class: CompareClass, code: BOOLEAN, length: [1..2]] RETURNS [BYTE];
getlabelmark: PROCEDURE RETURNS [EXLRIndex];
insertlabel: PROCEDURE [c: LabelCCIndex];
makeEXITlabel: PROCEDURE RETURNS [exit, loop: LabelCCIndex];
poplabels: PROCEDURE [labelmark: EXLRIndex];

--from stack.mesa
StackFinal: PROCEDURE;
StackInit: PROCEDURE;
adjustacstack: PROCEDURE [x: INTEGER];
bltnwordsfromstack: PROCEDURE [n: CARDINAL] RETURNS [tlx: se Lexeme];
chkacstack: PROCEDURE [b: BYTE];
chkrandsonstack: PROCEDURE [n: CARDINAL];
clearstack: PROCEDURE;
deletetomark: PROCEDURE;
dumpstack: PROCEDURE;
freeheaplex: PROCEDURE [l: se Lexeme];
freetemplist: PROCEDURE;
freetempsei: PROCEDURE [sei: ISEIndex];
genanonlex: PROCEDURE [nwords: CARDINAL] RETURNS [l: se Lexeme];
genstringbodylex: PROCEDURE [nchars: CARDINAL] RETURNS [l: se Lexeme];
genheaplex: PROCEDURE RETURNS [l: se Lexeme];
gentempsex: PROCEDURE [nwords: CARDINAL] RETURNS [l: se Lexeme];
incrstack: PROCEDURE [n: CARDINAL];
markstack: PROCEDURE;
newstack: PROCEDURE RETURNS [s: StkIndex];
pop: PROCEDURE;
poptempstate: PROCEDURE [p: POINTER TO TempStateRecord];
purgeheaplist: PROCEDURE [oldheaplist: ISEIndex];
purgependtemplist: PROCEDURE;
pushheaplist: PROCEDURE RETURNS [oldheaplist: ISEIndex];
pushtempstate: PROCEDURE [p: POINTER TO TempStateRecord, newfs: CARDINAL];
putrandsonstack: PROCEDURE [n: CARDINAL];
releasetempsex: PROCEDURE [l: se Lexeme];
resettomark: PROCEDURE;
restoreoldstack: PROCEDURE [s: StkIndex];
stackoff: PROCEDURE;
stackon: PROCEDURE;
unmarkstack: PROCEDURE;

-- from store.mesa
CRassign: PROCEDURE [r:BDOIndex, t: TreeLink, sei: ISEIndex, usePut: BOOLEAN];
sCassign: PROCEDURE [sei: ISEIndex];
s1Cassign: PROCEDURE [sei: ISEIndex, l: Lexeme, exp: BOOLEAN, nwords: CARDINAL];
transferconstruct: PROCEDURE [r: BDOIndex, t: TreeLink, tsei: CSEIndex];
easilyaddressed: PROCEDURE [r: BDOIndex] RETURNS [BOOLEAN];
LongTreeAddress: PROCEDURE [t: TreeLink] RETURNS [long: BOOLEAN];
LongLexAddress: PROCEDURE [l: Lexeme] RETURNS [long: BOOLEAN];

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END.