

```
-- BootDefs.Mesa Edited by Sandman on March 21, 1978 2:56 PM
```

```
DIRECTORY
```

```
AltoDefs: FROM "altodefs",  
AltoFileDefs: FROM "altofiledefs",  
SegmentDefs: FROM "segmentdefs";
```

```
DEFINITIONS FROM SegmentDefs;
```

```
BootDefs: DEFINITIONS SHARES SegmentDefs = BEGIN
```

```
-- Boot Primitive Objects
```

```
BootDataSegment: PROCEDURE [base: PageNumber, pages: PageCount]  
  RETURNS [seg: DataSegmentHandle];  
BootFileSegment: PROCEDURE [file: FileHandle, base: PageNumber,  
  pages: PageCount, access: AccessOptions, addr: POINTER]  
  RETURNS [seg: FileSegmentHandle];  
BootFile: PROCEDURE [access: AccessOptions] RETURNS [file: FileHandle];
```

```
-- Primitive Object Tables
```

```
Table: TYPE = RECORD [  
  free: Frob,  
  link: TableHandle,  
  seg: DataSegmentHandle];
```

```
TableHandle: TYPE = POINTER TO Table;
```

```
PageMap: TYPE = ARRAY [0..AltoDefs.MaxVMPage] OF SegmentHandle;
```

```
SystemTable: TYPE = RECORD [  
  pagemap: POINTER TO PageMap,  
  table: TableHandle];
```

```
SystemTableHandle: TYPE = POINTER TO SystemTable;
```

```
-- Table Management
```

```
GetSystemTable: PROCEDURE RETURNS [SystemTableHandle];
```

```
-- Object Management
```

```
FreePage: SegmentHandle = LOOPHOLE[0];  
BusyPage: SegmentHandle = LOOPHOLE[1];
```

```
InvalidObject: SIGNAL [object: POINTER];  
AllocateObject: PROCEDURE [CARDINAL] RETURNS [ObjectHandle];  
LiberateObject: PROCEDURE [ObjectHandle];  
ValidateObject: PROCEDURE [ObjectHandle];  
EnumerateObjects: PROCEDURE [type: ObjectType,  
  proc: PROCEDURE [ObjectHandle] RETURNS [BOOLEAN]]  
  RETURNS [ObjectHandle];
```

```
-- File Length Operations
```

```
NormalizeFileIndex: PROCEDURE [page: PageNumber, byte: CARDINAL]  
  RETURNS [PageNumber, CARDINAL];  
RoundFileIndex: PROCEDURE [page: PageNumber, byte: CARDINAL]  
  RETURNS [PageNumber, CARDINAL];  
TruncateFileIndex: PROCEDURE [page: PageNumber, byte: CARDINAL]  
  RETURNS [PageNumber, CARDINAL];
```

```
-- File Segment Positioning
```

```
FindSegHint: PROCEDURE [seg: FileSegmentHandle];  
PositionSeg: PROCEDURE [seg: FileSegmentHandle, useseg: BOOLEAN] RETURNS [BOOLEAN];
```

```
MapVM: PROCEDURE [seg: FileSegmentHandle, dc: AltoFileDefs.vDC];
```

```
END.
```