Device	**Starting address**
768 bytes of high-speed (15 ns) static RAM	0x0400
Four ACIAs	0x1000
One PIA	0x1010
Three buffers	0x1020
2K ROM	0x2800

Table 1: Desired System Configuration

Device	**Architecture**	**Chip-Select Labels**
2K RAM (low-speed)	2048×8 bits	CS_0,CS_1,CS_2
4K ROM	4096×8 bits	OE_1, $\overline{OE_2}$
MC6820 PIA (Parallel I/O)	4×8 bits	CS_0,$\overline{CS_1}$, $\overline{CS_2}$
MC6850 ACIA (Serial I/O)	2×8 bits	CS_0,$\overline{CS_1}$, $\overline{CS_2}$
Octal buffer	1×8 bits	G_0,$\overline{G_1}$
High-speed RAM	256×8 bits	$\overline{CS_0}$,$\overline{CS_1}$
16K ROM	16,384×8 bits	$\overline{OE}$
74LS165 Parallel-load 8-bit shift reg	1×8 bits	$\overline{LD}$
4K low-speed RAM	4096×8 bits	$\overline{OE_1}$

Table 2: Available Devices