A2.2 Circuit Details

The schematic diagrams in figures A2.8–A2.17 show the design of a complete MAYBE computer, which may be constructed from readily available parts. These diagrams focus on details useful in the construction of a MAYBE (for example, integrated-circuit packages and pin numbers) rather than the architectural structure of the machine; for insight into the latter, the reader will fare much better using the diagrams in chapter 11.

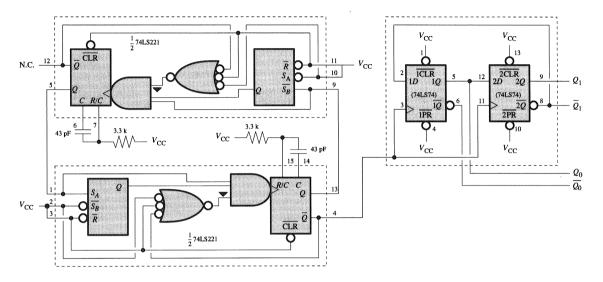


Figure A2.8 Left: System clock (nominal frequency is 3.7 MHz). Right: Gray-code counter.

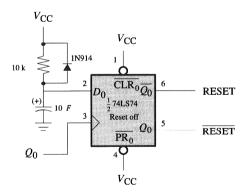


Figure A2.9 Reset circuitry.

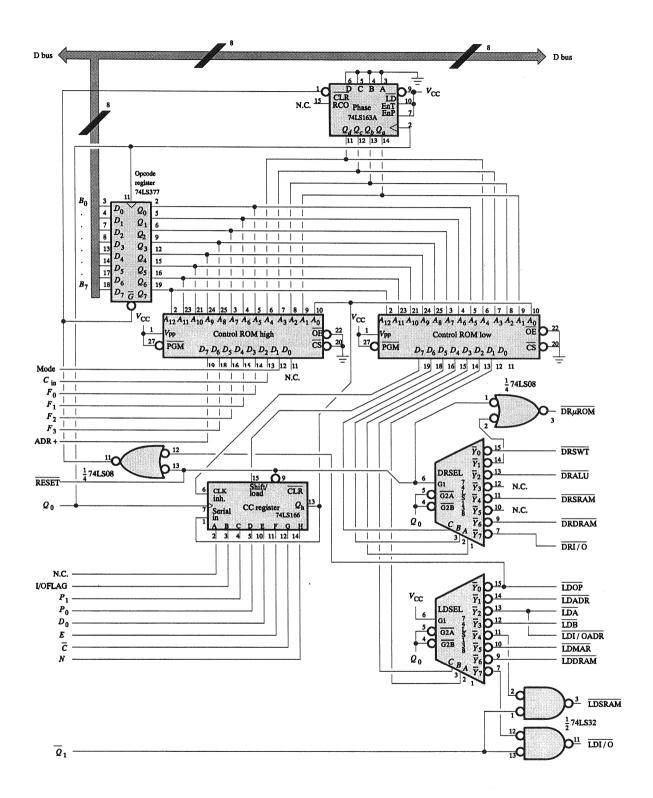


Figure A2.10 Control ROM.

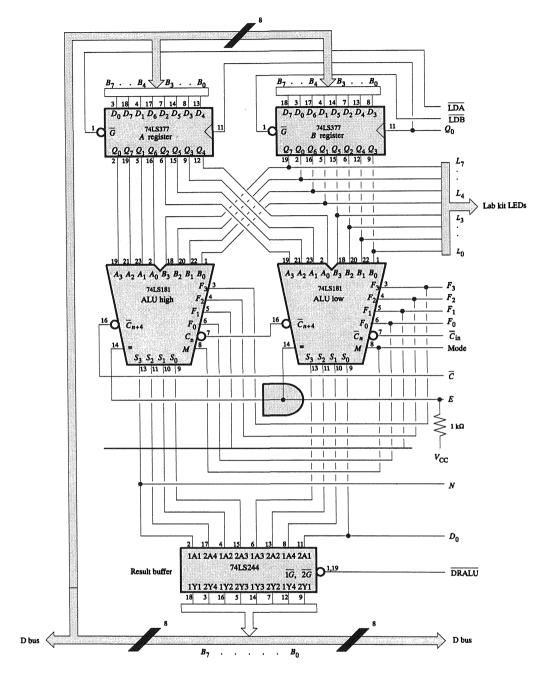


Figure A2.11 Arithmetic logic unit (PC card).

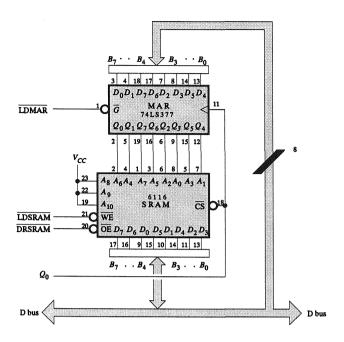


Figure A2.12 Static RAM (PC card).

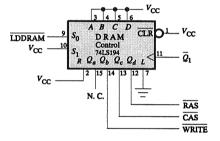


Figure A2.13 Dynamic RAM controller.

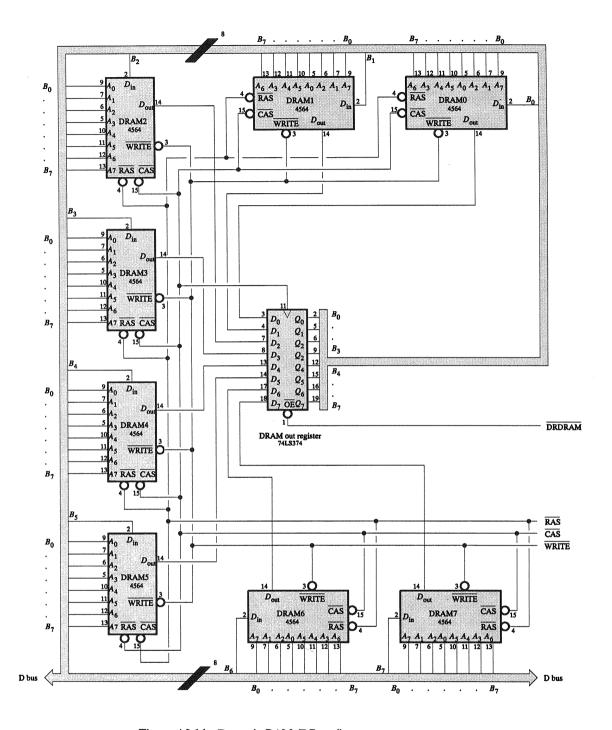


Figure A2.14 Dynamic RAM (PC card).

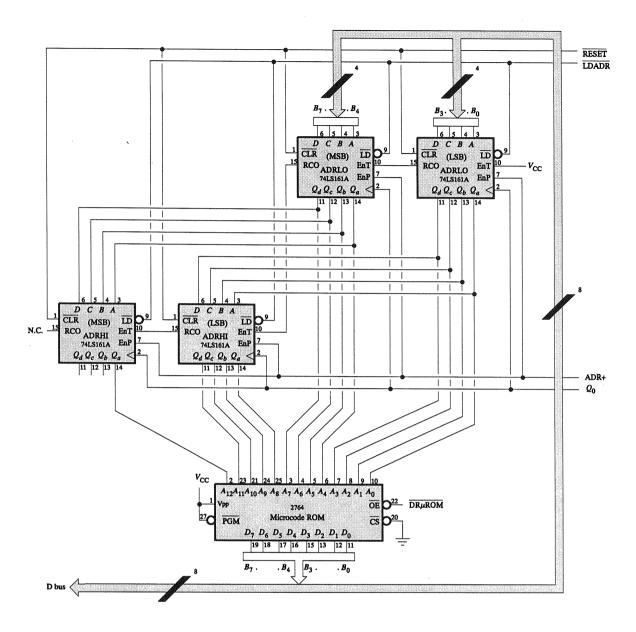


Figure A2.15 Microcode ROM (PC card).

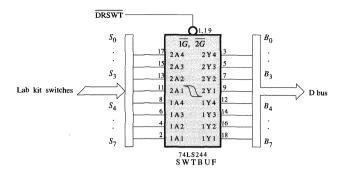


Figure A2.16 Switch buffer.