Chapter 7

System Design Techniques
Figure 7.1 The waterfall model of software development.
Figure 7.2 The spiral model of software design.
Figure 7.3 A successive refinement development model.
Figure 7.4 A simple hardware/software design methodology.
Figure 7.5 A hierarchical design flow for an embedded system.
**Figure 7.6** The SDL specification language.
Figure 7.7 An OR state in Statecharts.
Figure 7.8 An AND state in Statecharts.
Figure 7.9 An AND/OR table.

\[
\begin{array}{ccc}
\text{cond1 or (cond2 and cond3)} & \text{Expression} & \text{OR} \\
\hline
A & \text{cond1} & \text{T} & \text{—} \\
N & \text{cond2} & \text{—} & \text{T} \\
D & \text{cond3} & \text{—} & \text{F} \\
\end{array}
\]
Figure 7.10 Layout of a CRC card.
Figure 7.11 Long-lived bugs are more expensive to fix.
UN Figure 7.2
UN Figure 7.5

Inputs:
TCAS-operational-status: {operational, not-operational}
UN Figure 7.6
UN Figure 7.7