

5.2 Derivation of SM Charts

1 Method for Deriving an SM Chart for a Sequential Control Circuit

1. Draw a block diagram of the system.
2. Define the required input & output signals to the control circuit.
3. Construct the SM chart that tests the input signals and generates the proper sequence of output signals.

- Conversion of SM Chart to a Verilog Process

1. A case statement can be used to specify what happens in each state.

2. Each condition box corresponds directly to an if (else) statement