

The Text Editor

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Brief Description

- A Text Editor
 - UART
 - PS2 Keyboard
 - VGA
- Goal
 - Mimic Typing Experience of a Simplified Word Processor

UART

- Universal Asynchronous Receiver/Transmitter
 - A type of serial communication
 - Consists of a Receiving Block and Transmitting Block
 - *Only a Receiving Block Was Used
- UART Uses:
 - Change the Background Color
 - Change Text Color

UART

- Q = Black Background and Gold Text
- W = Black Background and Green Text
- E = Red Background and Green Text
- R = Blue Background and Red Text
- T = Yellow Background and Black Text
- Y = Magenta Background and White Text
- U = Green Background and Black Text

PS2 Keyboard

- Similar to UART (Serial Communication)
 - Synchronous
 - Data is Transferred and Keyboard is Powered Via USB Port
- Input for Text
- Sends Multiple Codes
 - Make
 - Break

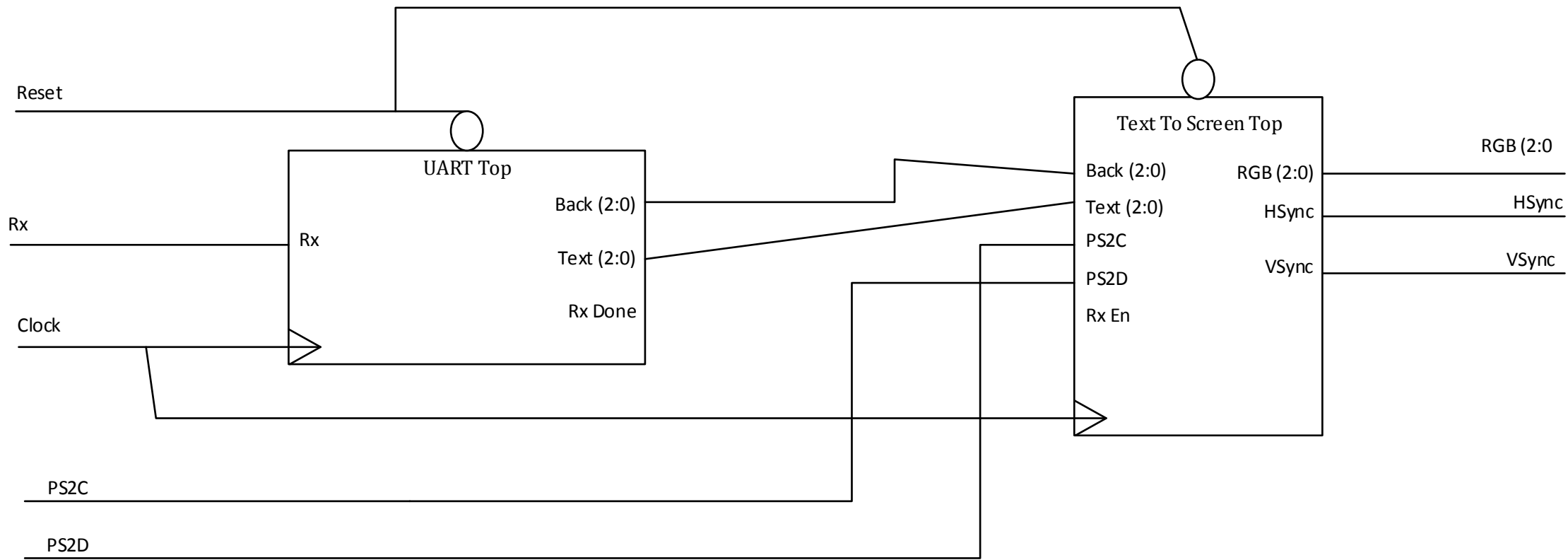
VGA/Output

- Grid System
 - Tile Mapping
 - Assigned 1 Bit Per Color
 - Red
 - Green
 - Blue
- Displays Background Color and Text

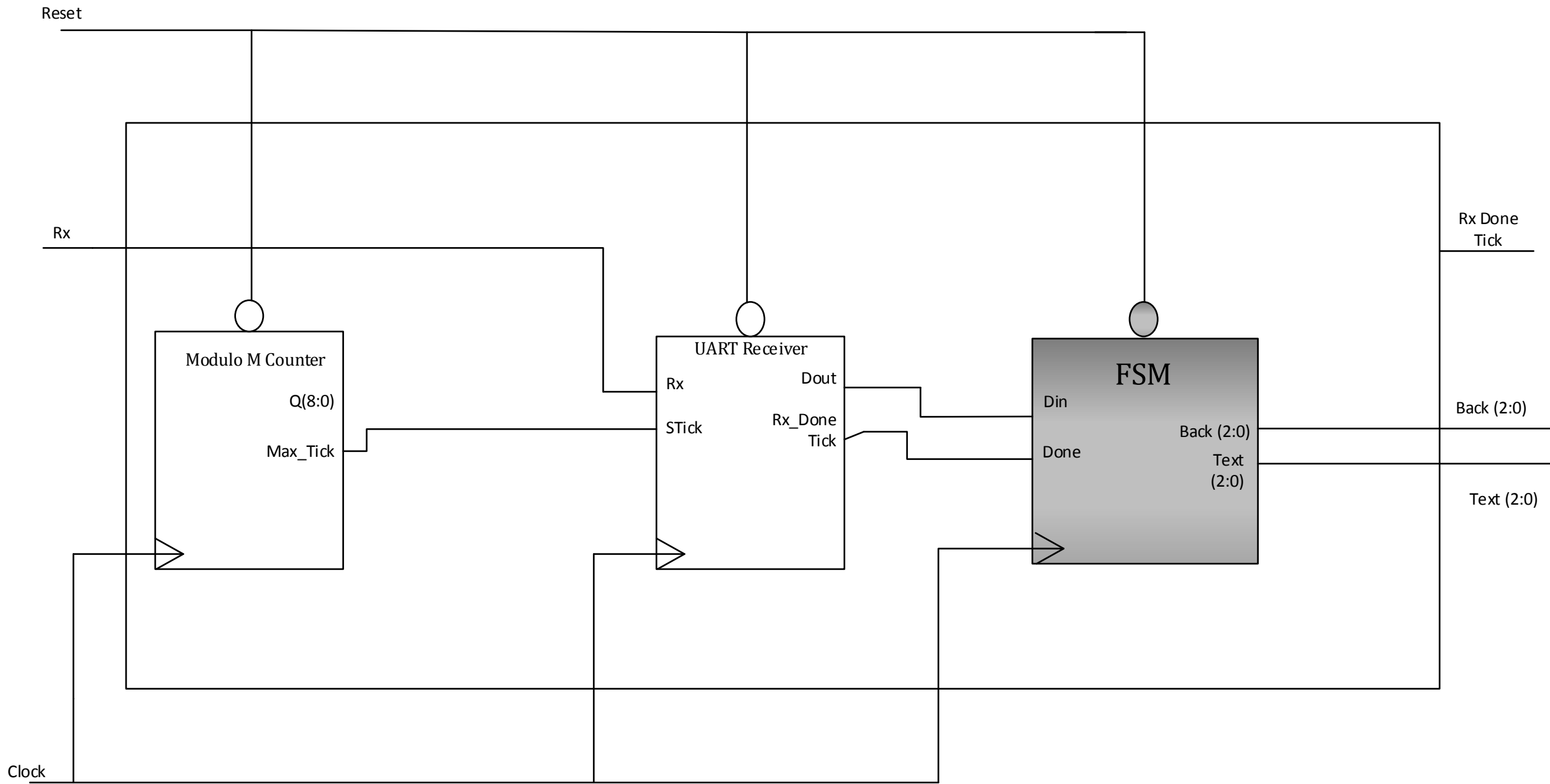
FSM 1

FSM 2

Top Schematic



UART Schematic



VGA/PS2 Schematic

