FName = X'3'_SW(3:0)

constant
3 — FName(7:4)

SW_3 ▷──▷ BUF ──── FName(3)
SW_2 ▷──▷ BUF ──── FName(2)
SW_1 ▷──▷ BUF ──── FName(1)
SW_0 ▷──▷ BUF ──── FName(0)

WAVreader
- FName(7:0)
- Start
- Abort
- DO_Pop
- DO_Rdy
- DO_L(15:0)
- DO_R(15:0)
- Busy
- FmtMnS
- Fmt8n16
- Reset — FmtSRate(15:0)
- Clk_50MHz — SRate_Tick
- Clk_Sys — Error(2:0)
- SDC_MISO
- SDC_MOSI
- SDC_SCK
- SDC_SS

RotaryEnc
- ROT_A ▷── ROT_A — RotL
- ROT_B ▷── ROT_B — RotR
- Clk

FSM_SendSamples
- SampRdy — DWr_Start
- SampL(15:0) — DWr_Cmd(3:0)
- SampR(15:0) — DWr_Adr(3:0)
- SRate_Tick — DWr_Data(11:0)
- DWr_Busy
- Reset — Samp_Pop
- Clk

DACWrite
- Start — SPI_MOSI
- Cmd(3:0) — SPI_MISO
- Addr(3:0) — SPI_SCK
- DATA(11:0) — DAC_CS
- DAC_CLR
- SPI_SS_B
- AMP_CS
- AD_CONV
- SF_CE0
- Reset — FPGA_INIT_B
- Clk_50MHz — Busy
- Clk_Sys

SDC_MISO ▷
SDC_MOSI ▷
SDC_SCK ▷
SDC_SS ▷

SPI_MOSI ▷
SPI_MISO ▷
SPI_SCK ▷
DAC_CS ▷
DAC_CLR ▷
SPI_SS_B ▷
AMP_CS ▷
AD_CONV ▷
FPGA_INIT_B ▷

LED7 ▷ Busy
LED6 ▷ Mono / ! Stereo
LED5 ▷ 8b / ! 16b
LED(2:0) ▷ Error: 000 - Card Init
001 - Card Format
010 - File Not Found
100 - Not WAV
101 - WAV Params
111 - No Error

Line(15:0) ───▷ Line(63:0)

constant
FFF0

LCD1x64
- Line(63:0) — LCD_E
- Blank(15:0) — LCD_RS
- LCD_RW
- Reset — LCD_D(3:0)
- Clk_50MHz — SF_CE

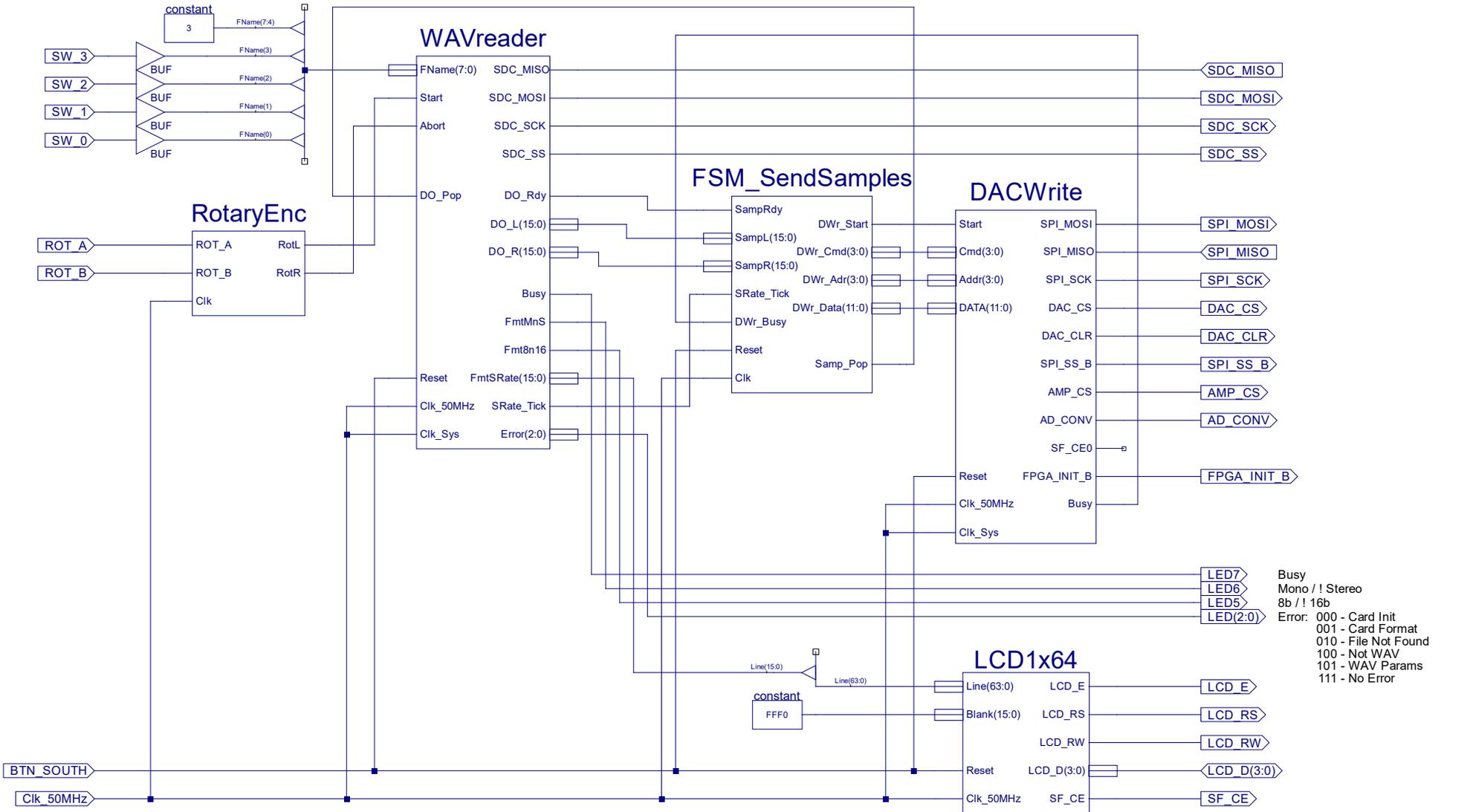LCD_E ▷
LCD_RS ▷
LCD_RW ▷
LCD_D(3:0) ▷
SF_CE ▷

BTN_SOUTH ▷
Clk_50MHz ▷

Test_WAVreader
DAC Channel C / D = Audio L / R
J.Sugier