PM DAC

LVDS TO LVPECL

LVPECL:
Vol: VCC-1.945 to VCC-1.695
Voh: VCC-1.145 to VCC-0.895

1,2,14^ DACP[9:0] — DACP[9:0]
1,2,14^ DACN[9:0] — DACN[9:0]

U52 SY89327L: IN+, IN-, NC1, NC2, OUT+, OUT-, VCC, GND, EP_GND
AO_3V3
CLKP, CLKN
C233 100n0_X7R, C235 100n0_X7R
DACCLKP, DACCLKN
R288 100R0F
R289 82R0F, R287 82R0F
C231 220n0_X7R

LVDS-LVPECL placed close to DAC pins 1 & 2

P7: SDEN, SCLK, SDIO, SDO

2,14^ DATACLKP
2,14^ DATACLKN

Close to Connector

1,14^ SDEN, SCLK, SDIO, SDO
R34 22R0F, R291 22R0F, SDO_B

Close to DAC

1,14^ RESETN

U6 DAC3154 (LVDS)
DATACLKP, DATACLKN, D9P, D9N, D8P, D8N, D7P, D7N, D6P, D6N, D5P, D5N, D4P, D4N, D3P, D3N, D2P, D2N, D1P, D1N, D0P, D0N
DACP9, DACN9, DACP8, DACN8, DACP7, DACN7, DACP6, DACN6, DACP5, DACN5, DACP4, DACN4, DACP3, DACN3, DACP2, DACN2, DACP1, DACN1, DACP0, DACN0
VIOVDD, ALIGNP, ALIGNN, SYNCP, SYNCN, RESETB, SDENB, SCLK, SDIO, SDO, ALARM, TXENABLE, SLEEP, NC8, NC7, NC6, NC5, NC4, NC3, NC2, NC1
IOUTAP, IOUTAN, DACCLKP, DACCLKN, VDDA33, VFUSE, VDDA18, IOVDD, DIGVDD18, CLKVDD18, EP_GND, BIASJ, EXTIO, NC9, NC10, NC13, NC14, OUTBP, OUTBN

PM AMP: IN+, IN-
PM AMP2: IN+, IN-

R24 22R0F, R21 22R0F
V2V5, V1V8
R359 0R0F, R360 Do Not Stuff
SET MAXIMUM CURRENT
R28 953R0F
C22 100n0_X7R
R29 22R0F, R30 22R0F

AO_3V3
R350 249R0F
D15 LED_ORANGE_Discrete
Q13
R351 10K0D

V1V8
C11 220n0_X7R, C36 220n0_X7R, C14 220n0_X7R
VIOVDD

AO_3V3
C26 220n0_X7R, C25 220n0_X7R, C20 220n0_X7R

V1V8
C232 220n0_X7R, C239 220n0_X7R, C236 220n0_X7R, C16 220n0_X7R, C13 220n0_X7R, C31 220n0_X7R, C12 220n0_X7R

FPGA LVCMOS25
Voh: 2.1
Vol: 0.4
Vih: 1.7
Vil: 0.7

Buffer
Voh: 1.7 Vol: 0.63
1.8: Vih: 1.17, Vil: 0.63
2.5: Vih: 1.6, Vil: 0.7

FPGA @ 1.8
Voh: 1.35, Vol: 0.45
Vih: 1.17, Vil: 0.63

DAC SPI
Vih: 1.08
Vil: 0.45
Voh: 1.53
Vol: 0.225

DAC LVDS
Vid: 175
Vcm: 1 to 2

FPGA LVDS
Vod: 247
Vocm: 1 to 1.425

Lidwave
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Size	Document Number	Rev
A4	<Doc>	A

Date: Monday, December 20, 2021 Sheet 23 of 33