

8-Output Any-Frequency CMOS Clock Generator

Overview

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Part: Si5351C
 Created By: ClockBuilder Pro v2.37.0.1 [2019-09-26]
 Timestamp: 2019-10-07 20:13:11 GMT+01:00

Design Rule Check

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Errors:

- No errors

Warnings:

- No warnings

Design

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Inputs:

IN0: Unused
 IN1: 50 MHz

Outputs:

OUT0: 20 MHz
 Disabled LVCMOS 8 mA
 Offset 0.000 s
 OUT1: 80 MHz
 Enabled LVCMOS 8 mA
 Offset 0.000 s
 OUT2: 49.152 MHz
 Enabled LVCMOS 8 mA
 Offset 0.000 s
 OUT3: 147.456 MHz
 [OUT2*3]
 Disabled LVCMOS 8 mA
 Offset 0.000 s
 OUT4: Unused
 OUT5: 50 MHz
 Enabled LVCMOS 8 mA
 Offset 0.000 s
 OUT6: 20 MHz
 Enabled LVCMOS 8 mA
 Offset 0.000 s
 OUT7: Unused

Frequency Plan

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PLL_A:

Enabled Features = None
 FVCO = 884.736 MHz
 M = 35.38944

Input1:

Source = CLKIN
 Source Frequency = 50 MHz
 P = 2 (2^1)
 Fpfd = 25 MHz

Output0:

Features = None
 Disabled State = StopLow
 R = 1 (2^0)
 Fout = 20 MHz
 N = 44.2368

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Output1:
  Features          = None
  Disabled State    = StopLow
  R                 = 1 (2^0)
  Fout              = 80 MHz
  N                 = 11.0592

Output2:
  Features          = None
  Disabled State    = StopLow
  R                 = 1 (2^0)
  Fout              = 49.152 MHz
  N                 = 18

Output3:
  Features          = None
  Disabled State    = StopLow
  R                 = 1 (2^0)
  Fout              = 147.456 MHz
  N                 = 6

Output5:
  Features          = None
  Disabled State    = StopLow
  R                 = 1 (2^0)
  Fout              = 50 MHz
  N                 = 17.69472

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PLL_B:
  Enabled Features = None
  Fvco             = 880 MHz
  M                = 35.2

Input1:
  Source           = CLKIN
  Source Frequency = 50 MHz
  P                = 2 (2^1)
  Fpfd             = 25 MHz

Output6:
  Features          = None
  Disabled State    = StopLow
  R                 = 1 (2^0)
  Fout              = 20 MHz
  N                 = 44

```

Settings

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Location	Setting Name	Decimal value	Hex value
0x0002[3]	XO_LOS_MASK	1	0x1
0x0002[4]	CLK_LOS_MASK	0	0x0
0x0002[5]	LOL_A_MASK	0	0x0
0x0002[6]	LOL_B_MASK	0	0x0
0x0002[7]	SYS_INIT_MASK	0	0x0
0x0003[7:0]	CLK_OEB	9	0x09
0x0007[7:4]	I2C_ADDR_CTRL	0	0x0
0x000F[2]	PLLA_SRC	1	0x1
0x000F[3]	PLLB_SRC	1	0x1
0x000F[4]	PLLA_INSELB	0	0x0
0x000F[5]	PLLB_INSELB	0	0x0
0x000F[7:6]	CLKIN_DIV	1	0x1
0x0010[1:0]	CLK0_IDRV	3	0x3
0x0010[3:2]	CLK0_SRC	3	0x3
0x0010[4]	CLK0_INV	0	0x0
0x0010[5]	MS0_SRC	0	0x0
0x0010[6]	MS0_INT	0	0x0
0x0010[7]	CLK0_PDN	0	0x0
0x0011[1:0]	CLK1_IDRV	3	0x3

0x0011[3:2]	CLK1_SRC	3	0x3
0x0011[4]	CLK1_INV	0	0x0
0x0011[5]	MS1_SRC	0	0x0
0x0011[6]	MS1_INT	0	0x0
0x0011[7]	CLK1_PDN	0	0x0
0x0012[1:0]	CLK2_IDRV	3	0x3
0x0012[3:2]	CLK2_SRC	3	0x3
0x0012[4]	CLK2_INV	0	0x0
0x0012[5]	MS2_SRC	0	0x0
0x0012[6]	MS2_INT	0	0x0
0x0012[7]	CLK2_PDN	0	0x0
0x0013[1:0]	CLK3_IDRV	3	0x3
0x0013[3:2]	CLK3_SRC	3	0x3
0x0013[4]	CLK3_INV	0	0x0
0x0013[5]	MS3_SRC	0	0x0
0x0013[6]	MS3_INT	1	0x1
0x0013[7]	CLK3_PDN	0	0x0
0x0014[1:0]	CLK4_IDRV	0	0x0
0x0014[3:2]	CLK4_SRC	3	0x3
0x0014[4]	CLK4_INV	0	0x0
0x0014[5]	MS4_SRC	0	0x0
0x0014[6]	MS4_INT	0	0x0
0x0014[7]	CLK4_PDN	1	0x1
0x0015[1:0]	CLK5_IDRV	3	0x3
0x0015[3:2]	CLK5_SRC	3	0x3
0x0015[4]	CLK5_INV	0	0x0
0x0015[5]	MS5_SRC	0	0x0
0x0015[6]	MS5_INT	0	0x0
0x0015[7]	CLK5_PDN	0	0x0
0x0016[1:0]	CLK6_IDRV	3	0x3
0x0016[3:2]	CLK6_SRC	3	0x3
0x0016[4]	CLK6_INV	0	0x0
0x0016[5]	MS6_SRC	1	0x1
0x0016[6]	FBA_INT	0	0x0
0x0016[7]	CLK6_PDN	0	0x0
0x0017[1:0]	CLK7_IDRV	0	0x0
0x0017[3:2]	CLK7_SRC	3	0x3
0x0017[4]	CLK7_INV	0	0x0
0x0017[5]	MS7_SRC	0	0x0
0x0017[6]	FBB_INT	0	0x0
0x0017[7]	CLK7_PDN	1	0x1
0x001C[17:0]	MSNA_P1	4017	0x00FB1
0x001F[19:0]	MSNA_P2	2651	0x00A5B
0x001F[23:4]	MSNA_P3	3125	0x00C35
0x0024[17:0]	MSNB_P1	3993	0x00F99
0x0027[19:0]	MSNB_P2	3	0x00003
0x0027[23:4]	MSNB_P3	5	0x00005
0x002C[17:0]	MS0_P1	5150	0x0141E
0x002F[19:0]	MS0_P2	194	0x000C2
0x002F[23:4]	MS0_P3	625	0x00271
0x0034[17:0]	MS1_P1	903	0x00387
0x0037[19:0]	MS1_P2	361	0x00169
0x0037[23:4]	MS1_P3	625	0x00271
0x003C[17:0]	MS2_P1	1792	0x00700
0x003F[19:0]	MS2_P2	0	0x00000
0x003F[23:4]	MS2_P3	1	0x00001
0x0044[17:0]	MS3_P1	256	0x00100
0x0047[19:0]	MS3_P2	0	0x00000
0x0047[23:4]	MS3_P3	1	0x00001
0x0054[17:0]	MS5_P1	1752	0x006D8
0x0057[19:0]	MS5_P2	2888	0x00B48
0x0057[23:4]	MS5_P3	3125	0x00C35
0x005A[7:0]	MS6_P1	44	0x2C
0x005B[7:0]	MS7_P1	0	0x00



Si5351C Datasheet Addendum

Device Configuration Summary for Si5351C-BXXXXX-GM

Page 4 of 4

0x0095[14:0]	SSDN_P2	0	0x0000
0x0095[7]	SSC_EN	0	0x0
0x0097[14:0]	SSDN_P3	0	0x0000
0x0097[7]	SSC_MODE	0	0x0
0x0099[11:0]	SSDN_P1	0	0x000
0x009A[15:4]	SSUDP	0	0x000
0x00A2[21:0]	VCXO_PARAM	0	0x000000
0x00B7[7:6]	XTAL_CL	0	0x0
0x00BF[7:0]	SLAB_FIXREGSA0	3	0x03
0x00C0[7:0]	SLAB_FIXREGSD0	9	0x09
0x00CD[7]	SLAB_FIXREGS_EN	1	0x1

This datasheet addendum is provided as supplemental information to the Si5351C datasheet, located at www.silabs.com/timing. You can search for and download any datasheet addendum for ClockBuilder Pro generated custom part numbers. Go to <http://www.silabs.com/custom-timing> for more information.

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