

DAC38RF8x EVM

File Debug Settings Help

DAC38RFxx EVM GUI v2p0

Quick Start DAC38RF8x LMK04828 Low Level V Reconnect?

Overview Clocking SERDES and Lane Configuration JESD Block Digital(DAC A) Digital(DAC B) PAP Alarm Monitoring

SYSREF

Status Enable Phase Window

Delay: 1

PLL Settings

PLL Enable GSM PLL enable

PLL Sleep VCO Rdac: 8 Lock Det Win: 0

PLL Reset CP Curr (mA): 0.75 VCO TUNE: 64

CP sleep

SERDES Clock

ENDDIVCLK Multiplier: 5 Loop Bandwidth: 0

SLEEPPLL

VRANGE CLKBYP: 0

CLKTX

Sleep Peak to Peak Swing: 126mV

Idle

SYNC with SYSREF Invert

Idle

SIMULATION TEXAS INSTRUMENTS

Don't know what these are ...
no reference in datasheet

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DAC A

Link Configuration

| | | | | | | | | |
|----|----|----------|----|---|--------|----|--------|-----------|
| L | M | F | K | S | DIO | BD | ADJCNT | PHADJ |
| 4 | 2 | 1 | 31 | 0 | 0 | 0 | 0 | 0 |
| N | N' | JESDV | | | ADJDIR | CS | CF | Lane Skew |
| 16 | 16 | JESD204B | | | 0 | 0 | 0 | 0 |

SUBCLASSV RES1 RES2

Subclass 1 0 0

SCR HD

SCRAMBLE OFF ON

Elastic Buffer

RBD should be less than or equal to K.

Char. to Match x 1C

Match what? CONTROL

31

FIFO errors zeros data

TX Does not allow lane syncing Comma Align EN

Errors for SYNC Request and Reporting

S = Enable SYNC Request
R = Enable Error Reporting

4 phases

Init SLICE0 OFF

- Multi-frame alignment error
- Frame alignment error
- Link configuration error
- Elastic buffer overflow
- Elastic buff. end char mismatch
- Code synchronization error
- 8b/10b not-in-table code error
- 8b/10b disparity error

DAC B

Link Configuration

| | | | | | | | | |
|----|----|----------|----|---|--------|----|--------|-----------|
| L | M | F | K | S | DIO | BD | ADJCNT | PHADJ |
| 4 | 2 | 1 | 31 | 0 | 0 | 0 | 0 | 0 |
| N | N' | JESDV | | | ADJDIR | CS | CF | Lane Skew |
| 16 | 16 | JESD204B | | | 0 | 0 | 0 | 0 |

SUBCLASSV RES1 RES2

Subclass 1 0 0

SCR HD

SCRAMBLE OFF ON

Elastic Buffer

RBD should be less than or equal to K.

Char. to Match x 1C

Match what? CONTROL

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FIFO errors zeros data

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Errors for SYNC Request and Reporting

S = Enable SYNC Request
R = Enable Error Reporting

Phase mode 4 phases

Init SLICE1 OFF

- Multi-frame alignment error
- Frame alignment error
- Link configuration error
- Elastic buffer overflow
- Elastic buff. end char mismatch
- Code synchronization error
- 8b/10b not-in-table code error
- 8b/10b disparity error

Reserved ... so OK

Idle SIMULATION TEXAS INSTRUMENTS

Not sure what these are?

Reserved ... so OK

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Dual IQ mode

Invert DAC Output

Inverse sinc enable

TX enable

Alarms zeros TX enable

Alarm zeros JESD data?

Alarm output enable

Clear serdes FIFO errors

From 2nd multi-DAC

Output Delay: 0

CDRV sysref mode: Use only the next

CDRV sysref delay: 0

GainAB: 1

GainCD EN: 1

GainCD: 1

Output sum select:

- Add Path AB sample
- Add Path CD sample
- Add Path AB sample (adjacent DAC)
- Add Path CD sample (adjacent DAC)
- encoder clk sync
- full rate clk enable
- full rate clk divider enable
- Distortion Enhancement

Mixer

| | Path AB | Path CD |
|--------------|-------------------------------------|--------------------------|
| Mixer enable | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Mixer Gain | 6dB | 0dB |
| Coarse Mix | no | no mixing |
| SYNC select | sysref | SIF sync |

NCO

| | Path AB | Path CD |
|--------------------|-------------------------------------|--------------------------|
| NCO enable | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Sampling rate(MHz) | 7500 | |
| NCO Frequency(MHz) | 1 | 0 |
| NCO Phase (deg) | 0 | 0 |
| SYNC select | sysref | SIF sync |

UPDATE NCO

SIF SYNC

Interpolation: 6x

Data format: 2s complement

Constant Input:

Bitwidth: 16bits

FIFO offset: 7

Constant Value: x 0000

Idle

SIMULATION TEXAS INSTRUMENTS

Don't know what these are?

Is this fixed or dynamic as in feedback calibration?