

DVS-MIPI 1GHz Register Configuration

SETFILE INFORMATION

Frame Rate : 2000 fps
 Global Reset : Off
 Global Hold : On
 Fixed Frame : On
 Event Clock : 125.6 Mhz
 MIPI Lane Speed : 1Gbps
 Num Of MIPI Lane : 4
 Data Type : AER
 Payload Size : 8192
 Num of Payload : 128
 OUTPUT Mode : MIPI
 PCLK Speed : NONE

SYSTEM SETTING

s322512 // DTAG_GR_ON_NUM_r
 s016631 // EVTH_REF_LSB_r
 s300c00 // STREAM_OUT_MODE_r(0 : MIPI, 1 : PARALLEL)
 s30a100 // [0] : OUTIF_PARA_ENABLE
 s307004 // PLL_P : Default 0x04, 20MHz 0x02
 s307101 // PLL_M_MSB : Default 0x01, 20MHz 0x00
 s30722C // PLL_M_LSB : Default 0x2C, 20MHz 0xFA
 s307300 // PLL_S : Default 0x00, 20MHz 0x00
 s307961 // [7:4] PLL_DIV_G, [3:0] PLL_DIV_DBR
 s307a11 // [7:4] PLL_DIV_OP, [3:0] PLL_DIV_OS
 s307b25 // [7:4] PLL_DIV_VS, [3:0] PLL_DIV_VP
 s307e00 // PLL_PD
 s30a001 // OUTIF_ENABLE
 s30a211 // DPHY_ENABLE
 s30a31f // DPHY_ENABLE
 s30a500 // DPHY_PLL_PMS
 s30a68D // DPHY_PLL_PMS
 s30a700 // DPHY_PLL_PMS
 s303b40 // TEST PAD CONTROL

 s30803F // CLOCK_ENABLE ([0] : MULTICLK_ENABLE)
 s308106 // CLOCK_ENABLE ([3] : DTPDTAG_ENABLE)
 s30836c // CLOCK_ENABLE

SYSTEM SETTING

s391524 // [5:4] mipi_ck_mode, [3] : use_line, [2] : use_frm, [1] : use_2_lane, [0] : use_1_lane
s39012a // MIPI_CSI2_DI_r
s390200 // csi2_pkt_size_low
s390320 // csi2_pkt_size_high
s390800 // D-PHY ULPS disable(0x00) enable(0x01)
s391A7F // frm_cnt_low
s391B00 // frm_cnt_high
s391081 // [7] : use_timeout, [0] : use_big_endian
s39117C // to_scnt0 (event clock) (1us)
s3912E7 // to_scnt1_low
s391303 // to_scnt1_high (1ms)
s391401 // to_mcnt
s391640 // pkt_gap_low
s391700 // pkt_gap_high
s391800 // frm_gap_low
s391995 // frm_gap_high
s39314c // [1:0] : HS-TX Regulator Output Level Control,
// [2] : HS TX Regulator Source Control,
// [3] : LP TX Regulator Source Control,
// [6:4] : LP TX Regulator Output Level Control at Current mode

SCAN RATE SETTING

s321604 // DTAG_SELX_r
s321702 // DTAG_SENSE_r
s32180C // DTAG_AY_r
s321905 // DTAG_AY_RST_GAP_r
s321A07 // DTAG_APS_RST_r
s321C04 // DTAG_COL_MARGIN_r

ANALOG SETTING

s01571F // CRGS Setting
s01660F // REG_DIV_BCM_BOT_UNIT_AMP
s016707 // REG_DIV_BCM_BOT_UNIT_ON
s01680f // REG_DIV_BCM_BOT_UNIT_nOFF

TIMESTAMP SETTING

s32B100 // TSTAMP_SUB_UNIT_VAL_r_MSB
s32B27D // TSTAMP_SUB_UNIT_VAL_r_LSB
s32B303 // TSTAMP_REF_UNIT_VAL_r_MSB
s32B4E7 // TSTAMP_REF_UNIT_VAL_r_LSB

s311f00
s304001
s430801
s430001
s490001

CROP SETTING

s330001 // CROP_BYPASS_r
s330100 // CROP_Y_GROUP_START_r
s3302FF // CROP_Y_START_MASK_r
s330359 // CROP_Y_GROUP_END_r
s3304FF // CROP_Y_END_MASK_r
s330500 // CROP_START_X_r_MSB
s330600 // CROP_START_X_r_LSB
s330703 // CROP_END_X_r_MSB
s3308BF // CROP_END_X_r_LSB
s330900 // CROP_FRAME_SKIP_ENABLE_r
s330A01 // CROP_FRAME_REPEAT_NUM_r
s330B00 // CROP_VALID_FRAME_START_NUM_r
s330C00 // CROP_VALID_FRAME_END_NUM_r

SLAVE MODE SETTING

s3A0001 // [0] : EXT_SYNC_IN_EN_r
s3A0101 // [0] : EXT_SYNC_RISING_SEL_r
s3A0200 // [0] : BURST_TRIGGER_MODE_EN_r
s3A0C00 // ECLK_FINE_COUNT_WIDTH_r_MSB
s3A0D7C // ECLK_FINE_COUNT_WIDTH_r_LSB
s3A0E03 // ECLK_COARSE_COUNT_WIDTH_r_MSB
s3A0F1F // ECLK_COARSE_COUNT_WIDTH_r_LSB (1us / LSB)
s3A1000 // FRAME_WIDTH_r
s328300 // [0] : DTAG_MULTI_SENSOR_r
s303B02 // [1] : EXT_SYNC_IN_EN_r
s32B600 // [1] : TSTAMP_EXT_RESET_r
s4c0001

STREAMING ON

s30916C // CCI_ADDRESS_CONTROL_2ND_r
s010001 // MODE_SELECT_r // [0]: Software Standby, [1]: Stream