

My Project

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Chapter 1

Data Structure Index

1.1 Data Structures

Here are the data structures with brief descriptions:

Chapter 2

File Index

2.1 File List

Here is a list of all documented files with brief descriptions:

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C:/Users/frivas/Documents/Panchy/git/thorlabs_software_lib/ thorlabs_pids.h	??

Chapter 3

Data Structure Documentation

3.1 MATH_REAL Package Body Reference

Package >> MATH_REAL

Functions

- REAL_VECTOR POWER_OF_2_SERIES(
D: in in NATURAL_VECTOR
INITIAL_VALUE: in in REAL
NUMBER_OF_VALUES: in in NATURAL
)
- REAL_ARR_3 CORDIC(
X0: in in REAL
Y0: in in REAL
Z0: in in REAL
N: in in NATURAL
CORDIC_MODE: in in CORDIC_MODE_TYPE
)
- REAL SIGN(X: in in REAL)
- REAL CEIL(X: in in REAL)
- REAL FLOOR(X: in in REAL)
- REAL ROUND(X: in in REAL)
- REAL TRUNC(X: in in REAL)
- REAL "MOD"(X: in in REAL, Y: in in REAL)
- REAL REALMAX(X: in in REAL, Y: in in REAL)
- REAL REALMIN(X: in in REAL, Y: in in REAL)
- REAL SQRT(X: in in REAL)
- REAL CBRT(X: in in REAL)
- REAL "**"(X: in in INTEGER, Y: in in REAL)
- REAL "**"(X: in in REAL, Y: in in REAL)
- REAL EXP(X: in in REAL)
- INTEGER ILOGB(X: in in REAL)
- REAL LDEXP(X: in in REAL, N: in in INTEGER)
- REAL LOG(X: in in REAL)
- REAL LOG2(X: in in REAL)
- REAL LOG10(X: in in REAL)

- REAL LOG(X: in in REAL, BASE: in in REAL)
- REAL SIN(X: in in REAL)
- REAL COS(X: in in REAL)
- REAL TAN(X: in in REAL)
- REAL ARCSIN(X: in in REAL)
- REAL ARCCOS(X: in in REAL)
- REAL ARCTAN(Y: in in REAL)
- REAL ARCTAN(Y: in in REAL, X: in in REAL)
- REAL SINH(X: in in REAL)
- REAL COSH(X: in in REAL)
- REAL TANH(X: in in REAL)
- REAL ARCSINH(X: in in REAL)
- REAL ARCCOSH(X: in in REAL)
- REAL ARCTANH(X: in in REAL)

Procedures

- UNIFORM(

variable SEED1: inoutPOSITIVE

variable SEED2: inoutPOSITIVE

variable X: outREAL

)

Constants

- MATH_E_P2 REAL:= 7 . 38905_60989_30650
- MATH_E_P10 REAL:= 22026 . 46579_48067_17
- MATH_EIGHT_PI REAL:= 25 . 13274_12287_18345_90770_115
- MAX_ITER INTEGER:= 27
- MAX_COUNT INTEGER:= 150
- BASE_EPS REAL:= 0 . 00001
- KC REAL:= 6 . 0725293500888142e - 01
- TWO_AT_MINUS REAL_VECTOR:=POWER_OF_2_SERIES(NATURAL_VECTOR'(100 , 90), 1 . 0 ,M← AX_ITER)
- EPSILON REAL_VECTOR_N:=(7 . 8539816339744827e - 01 , 4 . 6364760900080606e - 01 ,

2 . 4497866312686413e - 01 , 1 . 2435499454676144e - 01 , 6 . 2418809995957351e - 02 , 3

. 1239833430268277e - 02 , 1 . 5623728620476830e - 02 , 7 . 8123410601011116e - 03 , 3

. 9062301319669717e - 03 , 1 . 9531225164788189e - 03 , 9 . 7656218955931937e - 04 , 4

. 8828121119489829e - 04 , 2 . 4414062014936175e - 04 , 1 . 2207031189367021e - 04 , 6

. 1035156174208768e - 05 , 3 . 0517578115526093e - 05 , 1 . 5258789061315760e - 05 , 7

. 6293945311019699e - 06 , 3 . 8146972656064960e - 06 , 1 . 9073486328101870e - 06 , 9

. 5367431640596080e - 07 , 4 . 7683715820308876e - 07 , 2 . 3841857910155801e - 07 , 1

. 1920928955078067e - 07 , 5 . 9604644775390553e - 08 , 2 . 9802322387695303e - 08 , 1 .

4901161193847654e - 08 , 7 . 4505805969238281e - 09)

Types

- REAL_VECTORarray(NATURALrange<>)ofREAL
- NATURAL_VECTORarray(NATURALrange<>)ofNATURAL
- CORDIC_MODE_TYPE(ROTATION,VECTORING)

Subtypes

- **REAL_VECTOR_N** **REAL_VECTOR(0 toMAX_ITER)**
- **REAL_ARR_2** **REAL_VECTOR(0 to 1)**
- **REAL_ARR_3** **REAL_VECTOR(0 to 2)**
- **QUADRANT INTEGERrange 0 to 3**

The documentation for this class was generated from the following file:

- C:/Users/frivas/Documents/Panchy/git/thorlabs_software_lib/cpld/ip/_Real_.Math_.vhdl

Chapter 4

File Documentation

4.1 C:/Users/frivas/Documents/Panchy/git/thorlabs_software_lib/apt.h File Reference

APT Commands.

Macros

- #define **HOST_ID** 0x01
- #define **APT_COMMAND_SIZE** 6
- #define **MGMSG_SET_SER_TO_EEPROM** 0x00A0
- #define **MGMSG_GET_SER_STATUS** 0x00A1
- #define **MGMSG_BL_SET_FIRMWARE** 0x00A3
- #define **MGMSG_BL_REQ_FIRMWARE** 0x00A4
- #define **MGMSG_BL_GET_FIRMWARE** 0x00A5
- #define **MGMSG_GET_UPDATE_FIRMWARE** 0x00A6
- #define **MGMSG_RESET_FIRMWARE_LOADCOUNT** 0x00A7
- #define **MGMSG_BL_REQ_FIRMWAREVER** 0x002F
- #define **MGMSG_BL_GET_FIRMWAREVER** 0x0030
- #define **MGMSG_SET_RES_SCAN_ZOOM** 0x0859
- #define **MGMSG_SET_RES_SCAN_OFFSET** 0x085A
- #define **MGMSG_SET_3P_CONFIG** 0x0860
- #define **MGMSG_REQ_3P_CONFIG** 0x0861
- #define **MGMSG_GET_3P_CONFIG** 0x0862
- #define **MGMSG_3P_SAVE_CONFIG** 0x0863
- #define **MSMSG_REQ_SYS_TEMP** 0xffff2
- #define **MSMSG_GET_SYS_TEMP** 0xffff3
- #define **MSMSG_GET_SYS_PWM** 0xffff4
- #define **MGMSG_LATTICE_JED_UPDATE** 0x0855
- #define **MGMSG_DBG_PRINT** 0x0856
- #define **MGMSG_MOT_SET_VIRTUAL_P1** 0x0857
- #define **MGMSG_MOT_REQ_VIRTUAL_P1** 0x0858
- #define **MGMSG_MOT_GET_VIRTUAL_P1** 0x0859
- #define **MGMSG_MOT_SET_VIRTUAL_P2** 0x085A
- #define **MGMSG_MOT_REQ_VIRTUAL_P2** 0x085B
- #define **MGMSG_MOT_GET_VIRTUAL_P2** 0x085C
- #define **MGMSG_MOT_SET_VIRTUAL_MODE** 0x085D
- #define **MGMSG_MOT_REQ_VIRTUAL_MODE** 0x085E

- #define **MGMSG_MOT_GET_VIRTUAL_MODE** 0x085F
- #define **MGMSG_LA_REQ_JOYSTICK_INFO** 0x0857
- #define **MGMSG_LA_GET_JOYSTICK_INFO** 0x0858
- #define **MGMSG_LA_SET_JOYSTICK_MAP** 0x0859
- #define **MGMSG_LA_REQ_JOYSTICK_MAP** 0x085A
- #define **MGMSG_LA_GET_JOYSTICK_MAP** 0x085B
- #define **MGMSG_LA_REQ_JOYSTICK_DATA** 0x085C
- #define **MGMSG_LA_GET_JOYSTICK_DATA** 0x085D
- #define **MGMSG_SLOT_SET_TYPE** 0x0860
- #define **MGMSG_SLOT_REQ_TYPE** 0x0861
- #define **MGMSG_SLOT_GET_TYPE** 0x0862
- #define **MGMSG_SET_HW_REV** 0x0863
- #define **MGMSG_REQ_CPLD_WR** 0x0864
- #define **MGMSG_GET_CPLD_WR** 0x0865
- #define **MGMSG_TASK_CONTROL** 0x0866
- #define **MGMSG_SET_CARD_TYPE** 0x0867
- #define **MGMSG_RESTART_PROCESSOR** 0x0868
- #define **MGMSG_ERASE_EEPROM** 0x0869
- #define **MGMSG_HEX_SET_POSE** 0x0870
- #define **MGMSG_HEX_REQ_POSE** 0x0871
- #define **MGMSG_HEX_GET_POSE** 0x0872
- #define **MGMSG_FTDI_USB1_FMR_UPDATE** 0x00A6
- #define **MGMSG_FTDI_USB2_FMR_UPDATE** 0x00A7
- #define **MGMSG_HS_REQ_STATUSUPDATE** 0x0482
- #define **MGMSG_HS_GET_STATUSUPDATE** 0x0483
- #define **MGMSG_BOARD_REQ_STATUSUPDATE** 0x0484
- #define **MGMSG_BOARD_GET_STATUSUPDATE** 0x0485
- #define **MGMSG_BL_SET_FLASHPAGE** 0x00A8
- #define **MGMSG_BL_GET_FLASHPAGE** 0x00A9
- #define **MGMSG_LA_DISABLEAIMING** 0x0813
- #define **MGMSG_LA_ENABLEAIMING** 0x0814
- #define **MGMSG_SET_CABLE** 0x4000
- #define **MGMSG_REQ_CABLE** 0x4001
- #define **MGMSG_GET_CABLE** 0x4002
- #define **MGMSG_SET_CABLE_BOARD** 0x4003
- #define **MGMSG_REQ_CABLE_BOARD** 0x4004
- #define **MGMSG_GET_CABLE_BOARD** 0x4005
- #define **MGMSG_SET_SYNCHRONIZED_MOTION_PARAMS** 0x4006
- #define **MGMSG_REQ_SYNCHRONIZED_MOTION_PARAMS** 0x4007
- #define **MGMSG_GET_SYNCHRONIZED_MOTION_PARAMS** 0x4008
- #define **MGMSG_SET_SYNCHRONIZED_MOTION_POINT** 0x4009
- #define **MGMSG_SET_SYNCHRONIZED_MOTION_CLEAR_POINTS** 0x400A
- #define **MGMSG_SET_MCM_MIRROR_STATE** 0x400B
- #define **MGMSG_REQ_MCM_MIRROR_STATE** 0x400C
- #define **MGMSG_GET_MCM_MIRROR_STATE** 0x400D
- #define **MGMSG_MOD_REQ_JOYSTICK_INFO** 0x400E
- #define **MGMSG_MOD_GET_JOYSTICK_INFO** 0x400F
- #define **MGMSG_MOD_SET_JOYSTICK_MAP_IN** 0x4010
- #define **MGMSG_MOD_REQ_JOYSTICK_MAP_IN** 0x4011
- #define **MGMSG_MOD_GET_JOYSTICK_MAP_IN** 0x4012
- #define **MGMSG_MOD_SET_JOYSTICK_MAP_OUT** 0x4013
- #define **MGMSG_MOD_REQ_JOYSTICK_MAP_OUT** 0x4014
- #define **MGMSG_MOD_GET_JOYSTICK_MAP_OUT** 0x4015
- #define **MGMSG_MOD_SET_SYSTEM_DIM** 0x4016
- #define **MGMSG_MOD_REQ_SYSTEM_DIM** 0x4017

- #define **MGMSG_MOD_GET_SYSTEM_DIM** 0x4018
- #define **MGMSG_MIRROR_SET_PARAMS** 0x4019
- #define **MGMSG_MIRROR_REQ_PARAMS** 0x401A
- #define **MGMSG_MIRROR_GET_PARAMS** 0x401B
- #define **MGMSG_MIRROR_SET_PWM** 0x401C
- #define **MGMSG_MIRROR_REQ_PWM** 0x401D
- #define **MGMSG_MIRROR_GET_PWM** 0x401E
- #define **MGMSG_MOT_SET_CW_SOFT_LIMIT** 0x401F
- #define **MGMSG_MOT_SET_CCW_SOFT_LIMIT** 0x4020
- #define **MGMSG_MOT_CLEAR_SOFT_LIMIT** 0x4021
- #define **MGMSG_MOD_IDENTIFY** 0x0223
- #define **MGMSG_MOD_SET_CHANENABLESTATE** 0x0210
- #define **MGMSG_MOD_REQ_CHANENABLESTATE** 0x0211
- #define **MGMSG_MOD_GET_CHANENABLESTATE** 0x0212
- #define **MGMSG_HW_DISCONNECT** 0x0002
- #define **MGMSG_HW_RESPONSE** 0x0080
- #define **MGMSG_HW_RICHRESPONSE** 0x0081
- #define **MGMSG_HW_START_UPDATEMSGS** 0x0011
- #define **MGMSG_HW_STOP_UPDATEMSGS** 0x0012
- #define **MGMSG_HW_REQ_INFO** 0x0005
- #define **MGMSG_HW_GET_INFO** 0x0006
- #define **MGMSG_RACK_REQ_BAYUSED** 0x0060
- #define **MGMSG_RACK_GET_BAYUSED** 0x0061
- #define **MGMSG_HUB_REQ_BAYUSED** 0x0065
- #define **MGMSG_HUB_GET_BAYUSED** 0x0066
- #define **MGMSG_RACK_REQ_STATUSBITS** 0x0226
- #define **MGMSG_RACK_GET_STATUSBITS** 0x0227
- #define **MGMSG_RACK_SET_DIGOUTPUTS** 0x0228
- #define **MGMSG_RACK_REQ_DIGOUTPUTS** 0x0229
- #define **MGMSG_RACK_GET_DIGOUTPUTS** 0x0230
- #define **MGMSG_MOD_SET_DIGOUTPUTS** 0x0213
- #define **MGMSG_MOD_REQ_DIGOUTPUTS** 0x0214
- #define **MGMSG_MOD_GET_DIGOUTPUTS** 0x0215
- #define **MGMSG_HW_YES_FLASH_PROGRAMMING** 0x0017
- #define **MGMSG_HW_NO_FLASH_PROGRAMMING** 0x0018
- #define **MGMSG_MOT_SET_POSCOUNTER** 0x0410
- #define **MGMSG_MOT_REQ_POSCOUNTER** 0x0411
- #define **MGMSG_MOT_GET_POSCOUNTER** 0x0412
- #define **MGMSG_MOT_SET_ENCCOUNTER** 0x0409
- #define **MGMSG_MOT_REQ_ENCCOUNTER** 0x040A
- #define **MGMSG_MOT_GET_ENCCOUNTER** 0x040B
- #define **MGMSG_MOT_SET_VELPARAMS** 0x0413
- #define **MGMSG_MOT_REQ_VELPARAMS** 0x0414
- #define **MGMSG_MOT_GET_VELPARAMS** 0x0415
- #define **MGMSG_MOT_SET_JOGPARAMS** 0x0416
- #define **MGMSG_MOT_REQ_JOGPARAMS** 0x0417
- #define **MGMSG_MOT_GET_JOGPARAMS** 0x0418
- #define **MGMSG_MOT_REQ_ADCINPUTS** 0x042B
- #define **MGMSG_MOT_GET_ADCINPUTS** 0x042C
- #define **MGMSG_MOT_SET_POWERPARAMS** 0x0426
- #define **MGMSG_MOT_REQ_POWERPARAMS** 0x0427
- #define **MGMSG_MOT_GET_POWERPARAMS** 0x0428
- #define **MGMSG_MOT_SET_GENMOVEPARAMS** 0x043A
- #define **MGMSG_MOT_REQ_GENMOVEPARAMS** 0x043B
- #define **MGMSG_MOT_GET_GENMOVEPARAMS** 0x043C

- #define **MGMSG_MOT_SET_MOVERELPARAMS** 0x0445
- #define **MGMSG_MOT_REQ_MOVERELPARAMS** 0x0446
- #define **MGMSG_MOT_GET_MOVERELPARAMS** 0x0447
- #define **MGMSG_MOT_SET_MOVEABSPARAMS** 0x0450
- #define **MGMSG_MOT_REQ_MOVEABSPARAMS** 0x0451
- #define **MGMSG_MOT_GET_MOVEABSPARAMS** 0x0452
- #define **MGMSG_MOT_SET_HOMEPARAMS** 0x0440
- #define **MGMSG_MOT_REQ_HOMEPARAMS** 0x0441
- #define **MGMSG_MOT_GET_HOMEPARAMS** 0x0442
- #define **MGMSG_MOT_SET_LIMSWITCHPARAMS** 0x0423
- #define **MGMSG_MOT_REQ_LIMSWITCHPARAMS** 0x0424
- #define **MGMSG_MOT_GET_LIMSWITCHPARAMS** 0x0425
- #define **MGMSG_MOT_MOVE_HOME** 0x0443
- #define **MGMSG_MOT_MOVE_HOMED** 0x0444
- #define **MGMSG_MOT_MOVE_RELATIVE** 0x0448
- #define **MGMSG_MOT_MOVE_COMPLETED** 0x0464
- #define **MGMSG_MOT_MOVE_ABSOLUTE** 0x0453
- #define **MGMSG_MOT_MOVE_JOGL** 0x046A
- #define **MGMSG_MOT_MOVE_VELOCITY** 0x0457
- #define **MGMSG_MOT_MOVE_STOP** 0x0465
- #define **MGMSG_MOT_MOVE_STOPPED** 0x0466
- #define **MGMSG_MOT_SET_BOWINDEX** 0x04F4
- #define **MGMSG_MOT_REQ_BOWINDEX** 0x04F5
- #define **MGMSG_MOT_GET_BOWINDEX** 0x04F6
- #define **MGMSG_MOT_SET_DCPIDPARAMS** 0x04A0
- #define **MGMSG_MOT_REQ_DCPIDPARAMS** 0x04A1
- #define **MGMSG_MOT_GET_DCPIDPARAMS** 0x04A2
- #define **MGMSG_MOT_SET_AVMODES** 0x04B3
- #define **MGMSG_MOT_REQ_AVMODES** 0x04B4
- #define **MGMSG_MOT_GET_AVMODES** 0x04B5
- #define **MGMSG_MOT_SET_POTPARAMS** 0x04B0
- #define **MGMSG_MOT_REQ_POTPARAMS** 0x04B1
- #define **MGMSG_MOT_GET_POTPARAMS** 0x04B2
- #define **MGMSG_MOT_SET_BUTTONPARAMS** 0x04B6
- #define **MGMSG_MOT_REQ_BUTTONPARAMS** 0x04B7
- #define **MGMSG_MOT_GET_BUTTONPARAMS** 0x04B8
- #define **MGMSG_MOT_SET_EEPPROMPARAMS** 0x04B9
- #define **MGMSG_MOT_SET_PMDPOSITIONLOOPPARAMS** 0x04D7
- #define **MGMSG_MOT_REQ_PMDPOSITIONLOOPPARAMS** 0x04D8
- #define **MGMSG_MOT_GET_PMDPOSITIONLOOPPARAMS** 0x04D9
- #define **MGMSG_MOT_SET_PMDMOTOROUTPUTPARAMS** 0x04DA
- #define **MGMSG_MOT_REQ_PMDMOTOROUTPUTPARAMS** 0x04DB
- #define **MGMSG_MOT_GET_PMDMOTOROUTPUTPARAMS** 0x04DC
- #define **MGMSG_MOT_SET_PMDTRACKSETTLEPARAMS** 0x04E0
- #define **MGMSG_MOT_REQ_PMDTRACKSETTLEPARAMS** 0x04E1
- #define **MGMSG_MOT_GET_PMDTRACKSETTLEPARAMS** 0x04E2
- #define **MGMSG_MOT_SET_PMDPROFILEMODEPARAMS** 0x04E3
- #define **MGMSG_MOT_REQ_PMDPROFILEMODEPARAMS** 0x04E4
- #define **MGMSG_MOT_GET_PMDPROFILEMODEPARAMS** 0x04E5
- #define **MGMSG_MOT_SET_PMDJOYSTICKPARAMS** 0x04E6
- #define **MGMSG_MOT_REQ_PMDJOYSTICKPARAMS** 0x04E7
- #define **MGMSG_MOT_GET_PMDJOYSTICKPARAMS** 0x04E8
- #define **MGMSG_MOT_SET_PMDCURRENTLOOPPARAMS** 0x04D4
- #define **MGMSG_MOT_REQ_PMDCURRENTLOOPPARAMS** 0x04D5
- #define **MGMSG_MOT_GET_PMDCURRENTLOOPPARAMS** 0x04D6

- #define **MGMSG_MOT_SET_PMDSETTLEDCURRENTLOOPPARAMS** 0x04E9
- #define **MGMSG_MOT_REQ_PMDSETTLEDCURRENTLOOPPARAMS** 0x04EA
- #define **MGMSG_MOT_GET_PMDSETTLEDCURRENTLOOPPARAMS** 0x04EB
- #define **MGMSG_MOT_SET_PMDSTAGEAXISPARAMS** 0x04F0
- #define **MGMSG_MOT_REQ_PMDSTAGEAXISPARAMS** 0x04F1
- #define **MGMSG_MOT_GET_PMDSTAGEAXISPARAMS** 0x04F2
- #define **MGMSG_MOT_GET_STATUSUPDATE** 0x0481
- #define **MGMSG_MOT_REQ_STATUSUPDATE** 0x0480
- #define **MGMSG_MOT_GET_DCSTATUSUPDATE** 0x0491
- #define **MGMSG_MOT_REQ_DCSTATUSUPDATE** 0x0490
- #define **MGMSG_MOT_ACK_DCSTATUSUPDATE** 0x0492
- #define **MGMSG_MOT_REQ_STATUSBITS** 0x0429
- #define **MGMSG_MOT_GET_STATUSBITS** 0x042A
- #define **MGMSG_MOT_SUSPEND_ENDOFMOVEMSGS** 0x046B
- #define **MGMSG_MOT_RESUME_ENDOFMOVEMSGS** 0x046C
- #define **MGMSG_MOT_SET_TRIGGER** 0x0500
- #define **MGMSG_MOT_REQ_TRIGGER** 0x0501
- #define **MGMSG_MOT_GET_TRIGGER** 0x0502
- #define **MGMSG_MOT_SET_TDIPARAMS** 0x04FB
- #define **MGMSG_MOT_REQ_TDIPARAMS** 0x04FC
- #define **MGMSG_MOT_GET_TDIPARAMS** 0x04FD
- #define **MGMSG_MOT_SET_SOL_OPERATINGMODE** 0x04C0
- #define **MGMSG_MOT_REQ_SOL_OPERATINGMODE** 0x04C1
- #define **MGMSG_MOT_GET_SOL_OPERATINGMODE** 0x04C2
- #define **MGMSG_MOT_SET_SOL_CYCLEPARAMS** 0x04C3
- #define **MGMSG_MOT_REQ_SOL_CYCLEPARAMS** 0x04C4
- #define **MGMSG_MOT_GET_SOL_CYCLEPARAMS** 0x04C5
- #define **MGMSG_MOT_SET_SOL_INTERLOCKMODE** 0x04C6
- #define **MGMSG_MOT_REQ_SOL_INTERLOCKMODE** 0x04C7
- #define **MGMSG_MOT_GET_SOL_INTERLOCKMODE** 0x04C8
- #define **MGMSG_MOT_SET_SOL_STATE** 0x04CB
- #define **MGMSG_MOT_REQ_SOL_STATE** 0x04CC
- #define **MGMSG_MOT_GET_SOL_STATE** 0x04CD
- #define **MGMSG_MOT_SET_MFF_OPERPARAMS** 0x0510 /* modified */
- #define **MGMSG_MOT_REQ_MFF_OPERPARAMS** 0x0511
- #define **MGMSG_MOT_GET_MFF_OPERPARAMS** 0x0512
- #define **MGMSG_PZ_SET_POSCONTROLMODE** 0x0640
- #define **MGMSG_PZ_REQ_POSCONTROLMODE** 0x0641
- #define **MGMSG_PZ_GET_POSCONTROLMODE** 0x0642
- #define **MGMSG_PZ_SET_OUTPUTVOLTS** 0x0643
- #define **MGMSG_LA_SET_PARAMS** 0x0800
- #define **MGMSG_LA_REQ_PARAMS** 0x0801
- #define **MGMSG_LA_GET_PARAMS** 0x0802
- #define **MGMSG_LA_ENABLEOUTPUT** 0x0811
- #define **MGMSG_LA_DISABLEOUTPUT** 0x0812
- #define **MGMSG_HEX_SET_POSE** 0x0870
- #define **MGMSG_HEX_REQ_POSE** 0x0871
- #define **MGMSG_HEX_GET_POSE** 0x0872

Enumerations

- enum **asf_destination_ids** {
 MOTHERBOARD_ID = 0x11, **MOTHERBOARD_ID_STANDALONE** = 0x50, **SLOT_1_ID** = 0x21, **SLOT_2_ID** = 0x22,
 SLOT_3_ID = 0x23, **SLOT_4_ID** = 0x24, **SLOT_5_ID** = 0x25, **SLOT_6_ID** = 0x26,
 SLOT_7_ID = 0x27, **SYNC_MOTION_ID** = 0x28
 }

4.1.1 Detailed Description

APT Commands.

MGMSG_HW_REQ_INFO	0x0005
MGMSG_HW_GET_INFO	0x0006

Function: Sent to request hardware information from the controller.

REQ: structure (6 bytes):

0	1	2	5	4	5
header only					
05	00	00	00	d	s

Example: Request hardware info from controller #1

TX 05, 00, 00, 00, 11, 01

GET:

Response structure (90 bytes):

6 byte header followed by 84 byte (0x54) data packet as follows:

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
header						Serial Number				Model Number									Type

20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Firmware	Ver-	For internal use only																	

40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
For internal use only																			

60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
For internal use only																			

80	81	82	83	84	85	86	87	88	89
For internal use only					HW Version		Mod State		nchs

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