

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 , MAX_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 to MAX_ITER)
- **REAL_ARR_2** **REAL_VECTOR**(0 to 1)
- **REAL_ARR_3** **REAL_VECTOR**(0 to 2)
- **QUADRANT_INTEGER** range 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_.vhd

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_FIRMWAREEVER 0x002F`
- `#define MGMSG_BL_GET_FIRMWAREEVER 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 0xfff2`
- `#define MSMSG_GET_SYS_TEMP 0xfff3`
- `#define MSMSG_GET_SYS_PWM 0xfff4`
- `#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_SYNCHONIZED_MOTION_PARAMS** 0x4006
- #define **MGMSG_REQ_SYNCHONIZED_MOTION_PARAMS** 0x4007
- #define **MGMSG_GET_SYNCHONIZED_MOTION_PARAMS** 0x4008
- #define **MGMSG_SET_SYNCHONIZED_MOTION_POINT** 0x4009
- #define **MGMSG_SET_SYNCHONIZED_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_MORROR_SET_PARAMS 0x4019`
- `#define MGMSG_MORROR_REQ_PARAMS 0x401A`
- `#define MGMSG_MORROR_GET_PARAMS 0x401B`
- `#define MGMSG_MORROR_SET_PWM 0x401C`
- `#define MGMSG_MORROR_REQ_PWM 0x401D`
- `#define MGMSG_MORROR_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_UPDATESGS 0x0011`
- `#define MGMSG_HW_STOP_UPDATESGS 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_JOG** 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_EEPROMPARAMS** 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 Version				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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