
```

/*****
/*
/*
/* Basedef.h : Basic Data Type Definition Header File */
/*
/*
/*****
/*
/*
/* 1. Basic Data Type Definition */
/*
/* 2. Basic Constant Definition */
/*
/* 3. Basic Macro Definition */
/*
/*
/*
/*
/*
/***** Copyright (C) Yaskawa Electric Corporation *****/
/*
/* Rev.1.00 : 2002.10.25 T.Taniguchi */
/*
/*
/*
/*****
#ifndef _BASEDEF_H
#define _BASEDEF_H

/*-----*/
/* Configurations of the build environment */
/*-----*/
#if defined( __PowerPC )
#ifndef __BIG_ENDIAN__
#define __BIG_ENDIAN__
#endif
#elif defined( WIN32 )

```

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#define _VC_DEBUG_
#endif

/*****
/*                                     */
/*   Basic Data Type Definition       */
/*                                     */
*****/
#ifndef _VC_DEBUG_ /* 2012.08.24 Y.Oka Make Mercury Base Software */
typedef signed char    CHAR;
typedef unsigned char  UCHAR;
typedef short          SHORT;
typedef unsigned short USHORT;
typedef long           LONG;
typedef unsigned long  ULONG;
typedef int            INT;
typedef unsigned int   UINT;
/*-----*/
typedef volatile CHAR    VCHAR;
typedef volatile UCHAR   VUCHAR;
typedef volatile SHORT   VSHORT;
typedef volatile USHORT  VUSHORT;
typedef volatile LONG     VLONG;
typedef volatile ULONG    VULONG;
typedef volatile INT      VINT;
typedef volatile UINT     VUINT;
/*-----*/
//typedef enum BOOL{ FALSE=0, TRUE=1}  BOOL;
typedef int            BOOL;
typedef signed char    INT8;
typedef unsigned char  UINT8;
typedef short          INT16;
typedef unsigned short  UINT16;
typedef long           INT32;
typedef unsigned long   UINT32;
typedef long long      INT64;

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typedef unsigned long long    UINT64;
/*-----*/
typedef volatile BOOL        VBOOL;
typedef volatile INT8        VINT8;
typedef volatile UINT8       VUINT8;
typedef volatile INT16       VINT16;
typedef volatile UINT16      VUINT16;
typedef volatile INT32       VINT32;
typedef volatile UINT32      VUINT32;
typedef volatile INT64       VINT64;
typedef volatile UINT64      VUINT64;
/*-----*/
typedef const UCHAR          CCHAR;
typedef const USHORT         CSHORT;
typedef const ULONG          CULONG;
/*-----*/
typedef long                 KMGAIN;    /* {k,s} Type for Mulgain() */
typedef long                 KSGAIN;    /* {k,s} Type for PcalKsksks() */
/*-----*/
#define VOID                 void

#else /* _VC_DEBUG_ */ /* 2012.08.24 Y.Oka Make Mercury Base Software */

typedef char                 CHAR;
typedef unsigned char        UCHAR;
typedef short                SHORT;
typedef unsigned short       USHORT;
typedef long                 LONG;
typedef unsigned long        ULONG;
typedef int                  INT;
typedef unsigned int         UINT;
/*-----*/
typedef volatile CHAR        VCHAR;
typedef volatile UCHAR       VUCHAR;
typedef volatile SHORT       VSHORT;
typedef volatile USHORT      VUSHORT;
typedef volatile LONG        VLONG;

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typedef volatile ULONG      VULONG;
typedef volatile INT        VINT;
typedef volatile UINT       VUINT;
/*-----*/
//typedef enum BOOL{ FALSE=0, TRUE=1}  BOOL;
typedef int                 BOOL;
typedef signed char         INT8;
typedef unsigned char       UINT8;
typedef short               INT16;
typedef unsigned short      UINT16;
typedef signed int          INT32;
typedef unsigned int        UINT32;
typedef long long           INT64;
typedef unsigned long long  UINT64;
/*-----*/
typedef volatile BOOL       VBOOL;
typedef volatile INT8       VINT8;
typedef volatile UINT8      VUINT8;
typedef volatile INT16      VINT16;
typedef volatile UINT16     VUINT16;
typedef volatile INT32      VINT32;
typedef volatile UINT32     VUINT32;
typedef volatile INT64      VINT64;
typedef volatile UINT64     VUINT64;
/*-----*/
typedef const UCHAR         CUCHAR;
typedef const USHORT        CUSHORT;
typedef const ULONG         CULONG;
/*-----*/
typedef long                KMGAIN;    /* {k,s} Type for Mulgain()          */
typedef long                KSGAIN;    /* {k,s} Type for PcalKsksks()      */
/*-----*/
#define VOID                void

#endif /* _VC_DEBUG_ */ /* 2012.08.24 Y.Oka Make Mercury Base Software */

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#ifndef NULL
#define NULL ((void *)0)
#endif

/*****
/*                                     */
/*   Basic Structure type               */
/*                                     */
*****/
#ifdef __BIG_ENDIAN__
/*-----*/
/*   Double Byte Data Type Definition */
/*-----*/
typedef union DBYTEX
{
    USHORT w;           /* Word */
    struct {
        UCHAR h;
        UCHAR l;
    } b;               /* Low Byte / High Byte */
} DBYTEX;

/*-----*/
/*   Double Word Data Type Definition */
/*-----*/
typedef union DWORDX
{
    ULONG dw;           /* Double Word */
    LONG Long;          /* signed long */
    ULONG Ulong;        /* unsigned long */
    struct {
        USHORT h;
        USHORT l;
    } w;               /* Low Word / High Word */
    struct {
        UCHAR hh;

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    UCHAR h1;
    UCHAR lh;
    UCHAR ll;
} b;                /* Low Byte / High Byte      */
} DWORDX;

/*-----*/
/*   8 ビ ッ ト 構 成 デ ータ用構造体           */
/*-----*/
typedef union UDWORD
{
/*-----*/
    ULONG w;        /* Double Word          */
/*-----*/
    struct {
        USHORT h;
        USHORT l;
    } hw;          /* Low Word / High Word */
/*-----*/
    struct {
        UCHAR d[2];
        UCHAR h;
        UCHAR l;
    } b;           /* Low Byte / High Byte */
/*-----*/
} UDWORD;

#else /* Little Endian */

/*-----*/
/*   Double Byte Data Type Definition           */
/*-----*/
typedef union DBYTEX
{
    USHORT w;      /* Word          */
    struct {

```

```

    UCHAR l;
    UCHAR h;
} b;                /* Low Byte / High Byte          */
} DBYTEX;

/*-----*/
/*   Double Word Data Type Definition                      */
/*-----*/
typedef union DWORDX
{
    ULONG dw;        /* Double Word          */
    LONG  Long;      /* signed long          */
    ULONG Ulong;     /* unsigned long        */
    struct {
        USHORT l;
        USHORT h;
    } w;            /* Low Word / High Word */
    struct {
        UCHAR ll;
        UCHAR lh;
        UCHAR hl;
        UCHAR hh;
    } b;            /* Low Byte / High Byte */
} DWORDX;

/*-----*/
/*   8 ビ ッ ト 構 成 デ ータ用構造体                      */
/*-----*/
typedef union UDWORD
{
    ULONG w;        /* Double Word          */
    struct {
        USHORT l;
        USHORT h;
    } hw;          /* Low Word / High Word */
    struct {
        UCHAR l;

```

```

    UCHAR h;
} b;                /* Low Byte / High Byte          */
} UDWORD;

#endif /* __BIG_ENDIAN__ */

/*****
/*   Basic Structure type for Micro Program          */
*****/
/*****
/*   Data Type Definition                          */
*****/
//typedef __int64 INT64;          /* 64bit Integer          */
/*-----*/
typedef union {                /* Double Word Register          */
    INT64 dl;                  /* 64bit Register              */
    LONG l[2];                /* Long Register               */
    ULONG ul[2];              /* Long Register               */
    SHORT s[4];               /* Short Register              */
    USHORT us[4];             /* Short Register              */
} DLREG;
/*-----*/
typedef union {                /* Double Word Register          */
    LONG l;                   /* Long Register               */
    ULONG ul;                 /* Long Register               */
    SHORT s[2];               /* Short Register              */
    USHORT us[2];             /* Short Register              */
} DWREG;
/*-----*/
typedef struct {               /* Constant Data Register          */
    DWREG Zero;               /* Zero(0) Register            */
    DWREG PlusOne;            /* PlusOne(1) Register          */
    DWREG MinusOne;           /* MinusOne(-1) Register        */
} CREG;
/*-----*/

```

```

typedef const SHORT CSHORT;
/*-----*/

/*****
/*                                     */
/*   Basic Constant Definition                                     */
/*                                     */
/*****
#define   OK           0
#define   NG          -1          /* floader.hの 定 義 と 合わせる */
/*-----*/
#define   TRUE         1
#define   FALSE        0
/*-----*/
#define   ON           0
#define   OFF          1
/*-----*/

/*****
/*                                     */
/*   Basic Macro Definition                                     */
/*                                     */
/*****
#define LONGOF( 1, h ) ((LONG)((USHORT)(1) + ((SHORT)(h) << 16)))
#define ULONGOF( 1, h ) ((ULONG)((USHORT)(1) + ((ULONG)(h) << 16)))

/*****
/*                                     */
/*   Bit Data Definition                                     */
/*                                     */
/*****

```

```
#define BIT0  0x0001
#define BIT1  0x0002
#define BIT2  0x0004
#define BIT3  0x0008
#define BIT4  0x0010
#define BIT5  0x0020
#define BIT6  0x0040
#define BIT7  0x0080
#define BIT8  0x0100
#define BIT9  0x0200
#define BIT10 0x0400
#define BIT11 0x0800
#define BIT12 0x1000
#define BIT13 0x2000
#define BIT14 0x4000
#define BIT15 0x8000
```

```
#include "SystemSetting.h"
#include "SystemError.h"
```

```
#endif
/***** end of file *****/
```