BOD and TALARM Driver User Guide V1.00.01

1. Functions

DrvBOD_SelectBODVolt

Prototype

void DrvBOD_SelectBODVolt(uint8_t u8Volt);

Description

Select BOD voltage Level

Parameter

u8Volt: 7=4.5V, 6=3.V, 5=2.8V, 4=2.7V
3=2.5V, 2=2.4V 1=2.2V, 0=2.1V

Include

Driver/ DrvBODTALARM.h

Return Value

None

DrvBOD_ SelectBODHyst

Prototype

void DrvBOD_SelectBODHyst(uint8_t u8Hysteresis);

Description

Select BOD Hysteresis

Parameter

u8Hysteresis: 1= Enable Hysteresis of BOD detection
0= Hysteresis Disabled

Include

Driver/ DrvBODTALARM.h

Return Value

None

DrvBOD_ EnableBOD

Prototype

void DrvBOD_EnableBOD(uint32_t u32Enable);

Description

Enable BOD function

Parameter

u32Enable: 1x = Enable continuous BOD detection

01 = Enable time multiplexed BOD detection

00 = Disable BOD detection

Include

Driver/ DrvBODTALARM.h

Return Value

None

DrvBOD_ SetBODIE

Prototype

void DrvBOD_SetBODIE(uint32_t u32BODIE);

Description

Enable BOD Interrupt

Parameter

u32BODIE: 1 = Enable BOD interrupt

0 = Disable BOD interrupt

Include

Driver/ DrvBODTALARM.h

Return Value

None

DrvBOD_ GetBODout

Prototype

uint32_t DrvBOD_GetBODout(void);

Description

Get BOD output block

Parameter

None

Include

Driver/ DrvBODTALARM.h

Return Value

Output of BOD detection block

DrvBOD_ SetTALARMselect

Prototype

void DrvBOD_SetTALARMselect(uint32_t u32LVL);

Description

Set Tempature Alarm Sensor Level

Parameter

u32LVL: 1000b=145’C 0100b=135’C 0010b=125’C
0001b=115’C 0000b=105’C

Include

Driver/ DrvBODTALARM.h

Return Value

None

DrvBOD_ EnableTALARM

Prototype

void DrvBOD_EnableTALARM(uint32_t u32Enable);

Description

Enable TALARM function

Parameter

u32Enable: 1 = Enable TALARM detection
0 = Disable TALARM detection

Include

Driver/ DrvBODTALARM.h

Return Value

None

DrvBOD_ GetTALARMstatus

Prototype

uint32_t DrvBOD_GetTALARMstatus(void);

Description

Get status of TALARM

Parameter

None

Include

Driver/ DrvBODTALARM.h

Return Value

Status of TALARM block

DrvBOD_ SetTALARMIE

Prototype

void DrvBOD_SetTALARMIE(uint32_t u32TALARMIE);

Description

Enable BOD Interrupt

Parameter

u32TALARMIE: 1 = Enable TALARM interrupt
0 = Disable TALARM interrupt

Include

Driver/ DrvBODTALARM.h

Return Value

None

DrvBOD_ SetDetectionTime

Prototype

void DrvBOD_SetDetectionTime(uint32_t u32OnDUR, uint32_t u32OffDUR);

Description

Set up BOD detector to take periodic samples of the supply voltage to minimize power consumption

Parameter

u32OnDUR: Time BOD detector is active (ms)

u32OffDUR: Time BOD detector if off (ms)

Include

Driver/ DrvBODTALARM.h

Return Value

None

DrvBOD_ InstallISR

Prototype

void DrvBOD_InstallISR(PFN_DRVBODTALARM_CALLBACK callback,int32_t i32para);

Description

This function is used to install BOD & TALARM callback function

Parameter

callback: call back function

i32para: 0=Setting BOD call back function;
1=Setting TALARM call back function

Include

Driver/ DrvBODTALARM.h

Return Value

None

DrvBODTALARM_GetVersion

Prototype

int32_t DrvBOD_GetVersion(void);

Description

Get the version number of BOD driver.

Include

Driver/ DrvBODTALARM.h

Return Value

Version number :

31:24	23:16	15:8	7:0
00000000	MAJOR_NUM	MINOR_NUM	BUILD_NUM

2. Revision History

Version	Date	Description
1.00.01	Mar. 2011	Preliminary BOD and TALARM Driver User Guide of ISD9160