

## CAN API 函数说明

1. *u8 FCanPs\_init(FCanPs\_T \*dev, u32 id, u32 addr, u32 clk)*

描述	* @description Initialize can parameters.
参数	* @param dev is a pointer to the instance of can device. * @param id is id code of can 0 or 1. * @param addr is the base address of can device. * @param clk is the operate clock of can.
返回值	* @return 0 if successful, otherwise 1.

2. *u8 FCanPs\_setBaudRate(FCanPs\_T \*dev, u32 baud)*

描述	* @description * This function set can baud rate.
参数	* @param dev is a pointer to the instance of can device. * @param baud is baud rate value.
返回值	* @return 0 if successful, otherwise 1.

3. *u8 FCanPs\_setStdACR(FCanPs\_T \*dev, u32 id, u8 ptr, u8 byte1, u8 byte2, enum filter\_mode mode)*

描述	* This function set Acceptance Code Registers
参数	* @param dev is a pointer to the instance of can device. * @param id:11 bits

	* @param ptr: 0/1 0 -- remote frame, 1 -- data frame * @param byte1: * @param byte2: * @param mode: * single_filter * dual_filter
返回值	* @return 0 if successful, otherwise 1.

4. *u8 FCanPs\_setEffACR(FCanPs\_T \*dev, u32 id, u8 ptr, u8 byte1, u8 byte2, enum filter\_mode mode);*

描述	* This function set extended Acceptance Code Registers
参数	* @param dev is a pointer to the instance of can device. * @param id: 29 bits * @param ptr: 0/1 0 -- remote frame, 1 -- data frame * @param byte1: * @param byte2: * @param mode: * single_filter * dual_filter
返回值	* @return 0 if successful, otherwise 1.

5. *u8 FCanPs\_setAMR(FCanPs\_T \*dev,u32 AMR0,u32 AMR1,u32 AMR2,u32 AMR3)*

描述	* This function set Acceptance Mask Registers
参数	* @param dev is a pointer to the instance of can device. * @param AMR0~3 * 0's in AMR0 – 3 identify the bits at the corresponding positions in ACR0 – 3

	* which must be matched in the message identifier, '1's identify the corresponding bits * as 'don't care'.
返回值	* @return 0 if successful, otherwise 1.

#### 6. *u8 FCanPs\_setSleepMode(FCanPs\_T \*dev, enum FMSH\_state state)*

描述	* This function set Sleep Mode
参数	* @param dev is a pointer to the instance of can device. * @param state: * FMSH_err = -1, * FMSH_clear = 0, * FMSH_set = 1
返回值	* @return 0 if successful, otherwise 1.

#### 7. *u8 FCanPs\_setListenOnlyMode(FCanPs\_T \*dev, enum FMSH\_state state)*

描述	* This function set Listen Only Mode
参数	* @param dev is a pointer to the instance of can device. * @param state: * FMSH_err = -1, * FMSH_clear = 0, * FMSH_set = 1
返回值	* @return 0 if successful, otherwise 1.

#### 8. *u8 FCanPs\_setResetMode(FCanPs\_T \*dev, enum FMSH\_state state)*

描述	* This function set Reset Mode
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参数	* @param dev is a pointer to the instance of can device. * @param state: * FMSH_err = -1, * FMSH_clear = 0, * FMSH_set = 1
返回值	* @return 0 if successful, otherwise 1.

9. *u8 FCanPs\_setSelfTestMode(FCanPs\_T \*dev, enum FMSH\_state state)*

描述	* This function set Self Test Mode
参数	* @param dev is a pointer to the instance of can device. * @param state: * FMSH_err = -1, * FMSH_clear = 0, * FMSH_set = 1
返回值	* @return 0 if successful, otherwise 1.

10. *u8 FCanPs\_setReceiveFilterMode(FCanPs\_T \*dev, enum filter\_mode mode)*

描述	* This function set Acceptance Mask Mode
参数	* @param dev is a pointer to the instance of can device. * @param mode: * single_filter * dual_filter
返回值	* @return 0 if successful, otherwise 1.

11. *u32 FCanPs\_getReceiveBufferStatus(FCanPs\_T \*dev)*

描述	* This function returns the status of Receive Buffer Status.
参数	* @param dev is a pointer to the instance of can device.
返回值	* @return status: 0/1

12. *u32 FCanPs\_getDataOverrunStatus(FCanPs\_T \*dev)*

描述	* This function returns the status of Data Overrun Status.
参数	* @param dev is a pointer to the instance of can device.
返回值	* @return status: 0/1

13. *u32 FCanPs\_getTransmitBufferStatus(FCanPs\_T \*dev)*

描述	* This function returns the status of Transmit Buffer Status.
参数	* @param dev is a pointer to the instance of can device.
返回值	* @return status: 0/1

14. *u32 FCanPs\_getTransmissionCompleteStatus(FCanPs\_T \*dev)*

描述	* This function returns the status of Transmission Complete Status.
参数	* @param dev is a pointer to the instance of can device.
返回值	* @return status: 0/1

15. *u32 FCanPs\_getReceiveStatus(FCanPs\_T \*dev)*

描述	* This function returns the status of Receive Status
参数	* @param dev is a pointer to the instance of can device.

返回值	* @return     status: 0/1
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*16. u32 FCanPs\_getTtransmitStatus(FCanPs\_T \*dev)*

描述	* This function returns the status of Transmit Status
参数	* @param     dev is a pointer to the instance of can device.
返回值	* @return     status: 0/1

*17. u32 FCanPs\_getErrorStatus(FCanPs\_T \*dev)*

描述	* This function returns the status of Error Status
参数	* @param     dev is a pointer to the instance of can device.
返回值	* @return     status: 0/1

*18. u32 FCanPs\_getBusStatus(FCanPs\_T \*dev)*

描述	* This function returns the status of Bus Status
参数	* @param     dev is a pointer to the instance of can device.
返回值	* @return     status: 0/1

*19. u8 FCanPs\_transmissionRequest(FCanPs\_T \*dev)*

描述	* This function set Transmission Request
参数	* @param     dev is a pointer to the instance of can device.
返回值	* @return     0 if successful, otherwise 1.

20. *u8 FCanPs\_abortTransmission(FCanPs\_T \*dev)*

描述	* This function set Abort Transmission
参数	* @param dev is a pointer to the instance of can device.
返回值	* @return 0 if successful, otherwise 1.

21. *u8 FCanPs\_releaseReceiveBuffer(FCanPs\_T \*dev)*

描述	* This function set Release Receive Buffer
参数	* @param dev is a pointer to the instance of can device.
返回值	* @return 0 if successful, otherwise 1.

22. *u8 FCanPs\_clearDataOverrun(FCanPs\_T \*dev)*

描述	* This function clears data overrun.
参数	* @param dev is a pointer to the instance of can device.
返回值	* @return 0 if successful, otherwise 1.

23. *u8 FCanPs\_selfReceptionRequest(FCanPs\_T \*dev)*

描述	* This function set Self Reception Request
参数	* @param dev is a pointer to the instance of can device.
返回值	* @return 0 if successful, otherwise 1.

24. *u8 FCanPs\_setReceiveInterrupt(FCanPs\_T \*dev, enum FMSH\_state state)*

描述	* This function set Receive Interrupt
参数	* @param dev is a pointer to the instance of can device.

	<pre> * @param    state: *           FMSH_err = -1, *           FMSH_clear = 0, *           FMSH_set = 1 </pre>
返回值	<pre> * @return    0 if successful, otherwise 1. </pre>

#### 25. *u8 FCanPs\_setTransmitInterrupt(FCanPs\_T \*dev, enum FMSH\_state state)*

描述	<pre> * This function set Transmit Interrupt </pre>
参数	<pre> * @param    dev is a pointer to the instance of can device. * @param    state: *           FMSH_err = -1, *           FMSH_clear = 0, *           FMSH_set = 1 </pre>
返回值	<pre> * @return    0 if successful, otherwise 1. </pre>

#### 26. *u8 FCanPs\_setErrorWarningInterrupt(FCanPs\_T \*dev, enum FMSH\_state state)*

描述	<pre> * This function set Error Warning Interrupt </pre>
参数	<pre> * @param    dev is a pointer to the instance of can device. * @param    state: *           FMSH_err = -1, *           FMSH_clear = 0, *           FMSH_set = 1 </pre>
返回值	<pre> * @return    0 if successful, otherwise 1. </pre>



27. *u8 FCanPs\_setDataOverrunInterrupt(FCanPs\_T \*dev, enum FMSH\_state state)*

描述	* This function set Data Overrun Interrupt
参数	* @param dev is a pointer to the instance of can device. * @param state: * FMSH_err = -1, * FMSH_clear = 0, * FMSH_set = 1
返回值	* @return 0 if successful, otherwise 1.

28. *u8 FCanPs\_setWakeUpInterrupt(FCanPs\_T \*dev, enum FMSH\_state state)*

描述	* This function set Wake-Up Interrupt
参数	* @param dev is a pointer to the instance of can device. * @param state: * FMSH_err = -1, * FMSH_clear = 0, * FMSH_set = 1
返回值	* @return 0 if successful, otherwise 1.

29. *u8 FCanPs\_setErrorPassiveInterrupt(FCanPs\_T \*dev, enum FMSH\_state state)*

描述	* This function set Error Passive Interrupt
参数	* @param dev is a pointer to the instance of can device. * @param state: * FMSH_err = -1, * FMSH_clear = 0,

	* FMSH_set = 1
返回值	* @return 0 if successful, otherwise 1.

### 30. *u8 FCanPs\_setArbitrationLostInterrupt(FCanPs\_T \*dev, enum FMSH\_state state)*

描述	* This function set Arbitration Loss Interrupt
参数	* @param dev is a pointer to the instance of can device. * @param state: * FMSH_err = -1, * FMSH_clear = 0, * FMSH_set = 1
返回值	* @return 0 if successful, otherwise 1.

### 31. *u8 FCanPs\_setBusErrorInterrupt(FCanPs\_T \*dev, enum FMSH\_state state)*

描述	* This function set Bus Error Interrupt
参数	* @param dev is a pointer to the instance of can device. * @param state: * FMSH_err = -1, * FMSH_clear = 0, * FMSH_set = 1
返回值	* @return 0 if successful, otherwise 1.

### 32. *u8 FCanPs\_standardFrameTransmit(FCanPs\_T \*dev, u32 id,u8 \*sbuf,u8 len,enum frame\_type state)*

描述	* This function sends standard frame format message
参数	* @param dev is a pointer to the instance of can device.

	<ul style="list-style-type: none"> <li>* @param id is 11 bits</li> <li>* @param sbuf is buffer of message data</li> <li>* @param len is length of message</li> <li>* @param state is a enum frame_type:data_frame or remote_frame</li> </ul>
返回值	* @return 0 if successful, otherwise 1.

### 33. *u8 FCanPs\_extendedFrameTransmit(FCanPs\_T \*dev, u32 id, u8 \*sbuf, u8 len, enum frame\_type state)*

描述	* This function sends extended frame format message.
参数	<ul style="list-style-type: none"> <li>* @param dev is a pointer to the instance of can device.</li> <li>* @param id is 11 bits</li> <li>* @param sbuf is buffer of message data</li> <li>* @param len is length of message</li> <li>* @param state is a enum frame_type:data_frame or remote_frame</li> </ul>
返回值	* @return 0 if successful, otherwise 1.

### 34. *u8 FCanPs\_frameReceive(FCanPs\_T \*dev, u8 \*rbuf)*

描述	* This function receives message, read the receive buffer data.
参数	<ul style="list-style-type: none"> <li>* @param dev is a pointer to the instance of can device.</li> <li>* @param rbuf is buffer of message data to readback into</li> </ul>
返回值	* @return 0 if successful, otherwise 1.

### 35. *u32 FCanPs\_getInterrupt(FCanPs\_T \*dev)*

描述	* This function returns Interrupt Register value.
参数	* @param dev is a pointer to the instance of can device.

返回值	* @return value of inerrupt register.
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