

PSP EXCEPTION STORAGE APIs

CFE_PSP_Exception_LogData

Syntax	struct CFE_PSP_Exception_LogData *CFE_PSP_Exception_GetBuffer(uint32 seq)
Description	<p>Get the next buffer for exception buffer corresponding to sequence</p> <p>This function obtains a storage buffer corresponding to the given sequence number. The pointer to storage memory is directly returned.</p>
Parameters	[in] seq - Sequence number
Returns	Pointer to buffer.
Notes	It is not cleared or modified, and no checks are performed to determine if the sequence number is valid.

CFE_PSP_Exception_LogData

Syntax	struct CFE_PSP_Exception_LogData *CFE_PSP_Exception_GetNextContextBuffer(void)
Description	<p>Get the next buffer for exception context storage</p> <p>This function is invoked by the low level exception handler (typically an ISR/signal) to obtain a buffer for context capture.</p>
Parameters	None
Returns	Pointer to buffer - If successful NULL - If storage is full
Notes	The buffer is cleared (memset zero) before returning to the caller.

CFE_PSP_Exception_WriteComplete

Syntax	void CFE_PSP_Exception_WriteComplete(void)
Description	<p>Wrap up the storage of exception data</p> <p>This function is invoked by the low level exception handler (typically an ISR/signal) once the exception context capture is complete.</p>
Parameters	None
Returns	None
Notes	This should be invoked after a successful call to CFE_PSP_Exception_GetNextContextBuffer() to commit the information to the log.

CFE_PSP_Exception_Reset

Syntax	void CFE_PSP_Exception_Reset(void)
Description	<p>Reset the exception storage buffer</p> <p>This function resets the state of exception processing.</p>
Parameters	None
Returns	None
Notes	None

int32

Syntax	extern int32 CFE_PSP_ExceptionGetSummary_Impl(const struct CFE_PSP_Exception_LogData *Buffer, char *ReasonBuf, uint32 ReasonSize)
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Description	<p>Translate the exception context data into a string</p> <p>This function translates the exception context data into a user-friendly "reason" string.</p>
Parameters	<p>[in] Buffer - Pointer to the Buffer Context data previously stored by ISR/signal handler</p> <p>[out] ReasonBuf - Buffer to store string</p> <p>[in] ReasonSize - Size of string buffer</p>
Returns	CFE_PSP_SUCCESS on success
Notes	This is called in an application context to determine the cause of the exception.