GIC 接口函数

*1. u32 FGicPs_SetupInterruptSystem(FGicPs *InstancePtr);*

描述	* This function initializes GIC. * initialize Distributor and CPU interface.
参数	* @param InstancePtr is GIC handle.
返回值	* @return * 0 -- if successful

*2. s32 FGicPs_Connect(FGicPs *InstancePtr, u32 Int_Id, FMSH_InterruptHandler Handler, void *CallBackRef)*

描述	* Makes the connection between the Int_Id of the interrupt source and the * associated handler that is to run when the interrupt is recognized. The * argument provided in this call as the Callbackref is used as the argument * for the handler when it is called.
参数	* @param InstancePtr is a pointer to the FGicPs instance. * @param Int_Id contains the ID of the interrupt source and should be * in the range of 0 to FGicPs_MAX_NUM_INTR_INPUTS - 1 * @param Handler to the handler for that interrupt. * @param CallBackRef is the callback reference, usually the instance * pointer of the connecting driver.
返回值	* @return * 0 ------ if the handler was connected correctly.

*3. void FGicPs_Disconnect(FGicPs *InstancePtr, u32 Int_Id)*

描述	* Updates the interrupt table with the Null Handler and NULL arguments at the * location pointed at by the Int_Id. This effectively disconnects that interrupt * source from any handler. The interrupt is disabled also.
参数	* @param InstancePtr is a pointer to the FGicPs instance to be worked on. * @param Int_Id contains the ID of the interrupt source and should * be in the range of 0 to FGicPs_MAX_NUM_INTR_INPUTS - 1
返回值	* @return None.

*4. void FGicPs_Enable(FGicPs *InstancePtr, u32 Int_Id)*

描述	* Enables the interrupt source provided as the argument Int_Id. Any pending * interrupt condition for the specified Int_Id will occur after this function is * called.
参数	* @param InstancePtr is a pointer to the FGicPs instance. * @param Int_Id contains the ID of the interrupt source and should be * in the range of 0 to FGicPs_MAX_NUM_INTR_INPUTS - 1
返回值	* @return None.

*5. void FGicPs_Disable(FGicPs *InstancePtr, u32 Int_Id)*

描述	* Disables the interrupt source provided as the argument Int_Id such that the * interrupt controller will not cause interrupts for the specified Int_Id. The * interrupt controller will continue to hold an interrupt condition for the * Int_Id, but will not cause an interrupt.
参数	* @param InstancePtr is a pointer to the FGicPs instance.

	* @param Int_Id contains the ID of the interrupt source and should be * in the range of 0 to FGicPs_MAX_NUM_INTR_INPUTS - 1
返回值	* @return None.

*6. s32 FGicPs_SoftwareIntr(FGicPs *InstancePtr, u32 Int_Id, u32 Cpu_Id)*

描述	* Allows software to simulate an interrupt in the interrupt controller. This * function will only be successful when the interrupt controller has been * started in simulation mode. A simulated interrupt allows the interrupt * controller to be tested without any device to drive an interrupt input * signal into it.
参数	* @param InstancePtr is a pointer to the FGicPs instance. * @param Int_Id is the software interrupt ID to simulate an interrupt. * @param Cpu_Id is the list of CPUs to send the interrupt.
返回值	* @return * 0 -- if successful

*7. void FGicPs_SetPriorityTriggerType(FGicPs *InstancePtr, u32 Int_Id,u8 Priority, u8 Trigger)*

描述	** Sets the interrupt priority and trigger type for the specificd IRQ source.*
参数	** @param InstancePtr is a pointer to the instance to be worked on.* ** @param Int_Id is the IRQ source number to modify* ** @param Priority is the new priority for the IRQ source. 0 is highest* ** priority, 0xF8 (248) is lowest. There are 32 priority levels* ** supported with a step of 8. Hence the supported priorities are* ** 0, 8, 16, 32, 40 ..., 248.* ** @param Trigger is the new trigger type for the IRQ source.*

返回值	* *@return None*

*8. void FGicPs_GetPriorityTriggerType(FGicPs *InstancePtr, u32 Int_Id,u8 *Priority, u8 *Trigger)*

描述	* Gets the interrupt priority and trigger type for the specificd IRQ source.
参数	* @param InstancePtr is a pointer to the instance to be worked on. * @param Int_Id is the IRQ source number to modify * @param Priority is a pointer to the value of the priority of the IRQ * source. This is a return value. * @param Trigger is pointer to the value of the trigger of the IRQ * source. This is a return value.
返回值	* @return None.

*9. void FGicPs_InterruptMaptoCpu(FGicPs *InstancePtr, u8 Cpu_Id, u32 Int_Id)*

描述	* Sets the target CPU for the interrupt of a peripheral
参数	* @param InstancePtr is a pointer to the instance to be worked on. * @param Cpu_Id is a CPU number for which the interrupt has to be targeted * @param Int_Id is the IRQ source number to modify
返回值	* @return None.