SYS_Clk →		OSIF_Ic2Sw_Has_Data
$\begin{array}{c} SYS_Rst \longrightarrow \\ IC_Sig \longrightarrow \end{array}$	<u></u>	 → IC_Rdy
$\begin{array}{c} \text{IC_Rst} \longrightarrow \\ \text{OSIF_Sw2Ic_Data [31:0]} \longrightarrow \\ \end{array}$		OSIF_Sw2Ic_Full
OSIF_Sw2Ic_WE → OSIF_Ic2Sw_RE →	IC .	OSIF_Ic2Sw_Data [31:0] OSIF_Ic2Sw_Empty OSIF_Ic2Sw_Empty
OSIF_Hw2Ic_ <id>Data [31:0] → OSIF_Hw2Ic_<id>WE →</id></id>		OSIF_Hw2Ic_ <id>_Full OSIF_Ic2Hw_<id>_Data [31:0]</id></id>
$ \begin{array}{c} OSIF_Ic2Hw__RE \longrightarrow \\ OSIF_Res2Ic__Data [31:0] \longrightarrow \\ OSIF_Res2Ic__OSIF_Res2Ic__OSIF_Res2Ic_<$		OSIF_Ic2Hw_ <id>_Empty OSIF_Res2Ic_<id>_Full</id></id>
$\begin{array}{c} \text{OSIF_Res2Ic__WE} \longrightarrow \\ \text{OSIF_Ic2Res__RE} \longrightarrow \end{array}$	<u></u>	$\xrightarrow{\downarrow} OSIF_Ic2Res__Data [31:0]$ $\xrightarrow{\downarrow} OSIF_Ic2Res__Empty$