

Module AvMM_Conv

General information:

For using module you have to use structure *AvMM_Arr_t*, that is unconstrained array of record, than has next fields:

- Cmd – bus width 1 bit, used for read or write command (read 1b0, write 1b1)
- Addr – bus width is configurable as Avalon MM Slave
- Wr_Data – bus width 32 bits, data to write at address
- Wr_Data_Mask – bus width 32 bits, mask for Wr_Data field
- Rd_Data – bus width 32 bits, data, that you expect to read, if not, module will polling to read that address until return needable data
- Rd_Data_Mask – bus width 32 bits, mask for Rd_Data field

Function:

Interacts with *Avalon MM Slave* according to the interface of the same name and user logic

Generics:

- *AVMM_ADDR_WIDTH* – bus width of Avalon MM Slave interface
- *AVMM_DATA_WIDTH* – array width of *AvMM_Data_t*

Pins

Name	Direction	Width	Description
AvMM_Clk	in	1 bit	Clock, usually described at AvMM Slave Description
AvMM_Reset	in	1 bit	Reset signal
AvMM_Write	out	1 bit	Write command
AvMM_Read	out	1 bit	Read command
AvMM_Address	out	Config	Command address
AvMM_Writedata	out	32 bits	Write data to address
AvMM_Readdata	in	32 bits	Read data from address
AvMM_Waitrequest	in	1 bit	AvMM Slave busy signal
Rcfg_Req	in	1 bit	Request to start reconfiguration
AvMM_Data	in	Config	Array of <i>AvMM_Data_t</i>
AvMM_Data_Mask	in	Config	Data Mask for each element of array <i>AvMM_Data_t</i>
Rcfg_Done	out	1 bit	Signal, that means that whole array of commands was done