example

Demo example used for the testing of the ipxact2systemverilog tool.

Base Address 0x0

Registers

Address	Register Name	Description
0x00	reg0	write something useful for reg0
0x01	reg1	
0x02	reg2	write something useful for reg2
0x03	reg3	write something useful for reg3
0x04	reg4	reg4 is a very useful register. It can take down the moon when configured correctly.
0x05	reg5	reg5 is as useful as reg4 but without a reset value defined.
0x06	reg6	reg6 is a read only register.
0x07	reg7	write something useful for reg7
0x08	reg8	register with empty and no descriptions of the fields

reg0

Name reg0

Address 0x0

Reset Value 0x00000000

Access read-write

Description write something useful for reg0

Bits	Field name	Reset	Description
[31:24]	byte3	0x00	write something useful for field3

Bits	Field name	Reset	Description
[23:16]	byte2	0x00	write something useful for field2
[15:8]	byte1	0x00	write something useful for field1
[7:0]	byte0	0x00	write something useful for field0

byte0

Minimum 0x00

Maximum 0x07

reg1

Name reg1

Address 0x1

Reset Value 0x00000001

Access read-write

Description

Bits	Field name	Reset	Description
[31:0]	field0	0x00000001	write something useful for field0

field0

Minimum 0x00000004

Maximum 0x00000014

reg2

Name reg2

Address 0x2

Reset Value 0x00000001

Access read-write

Description write something useful for reg2

Bits	Field name	Reset	Description
[31:10]	unused0	0x000000	unused

Bits	Field name	Reset	Description
[9:8]	monkey4	0x0	which monkey
[7:6]	monkey3	0x0	which monkey
[5:4]	monkey2	0x0	which monkey
[3:2]	monkey	0x0	which monkey
1	power2	0x0	write something useful for field power2
0	power	0x1	write something useful for field power

monkey

Name	Value	Description
chimp	0x0	a monkey
gorilla	0x1	
phb	0x2	and another monkey

monkey2

Name	Value	Description
chimp	0x0	
gorilla	0x1	
phb	0x2	

monkey3

Name	Value	Description
phb	0x0	
gorilla	0x1	
chimp	0x2	

monkey4

Name	Value	Description
chimp	0x0	
gorilla	0x1	
bonobo	0x2	

reg3

Name reg3

Address 0x3

Reset Value 0x00000001

Access read-write

Description write something useful for reg3

Bits	Field name	Reset	Description
[31:0]	field0	0x00000001	write something useful for field0

reg4

Name reg4

Address 0x4

Reset Value 0x0000000c

Access read-write

Description reg4 is a very useful register. It can take down the moon when configured correctly.

Bits	Field name	Reset	Description
[31:0]	reg4	0x0000000c	

reg5

Name reg5

Address 0x5

Access read-write

Description reg5 is as useful as reg4 but without a reset value defined.

Bits	Field name	Description
[31:0]	reg5	

reg6

Name reg6

Address 0x6

Access read-only

Description reg6 is a read only register.

Bits	Field name	Description
[31:0]	reg6	

reg7

Name reg7

Address 0x7

Reset Value 0x00000000

Access read-write

Description write something useful for reg7

Bits	Field name	Reset	Description
[31:20]	unused2	0x000	unused
[19:16]	nibble2	0x0	write something useful for nibble2
[15:12]	unused1	0x0	unused
[11:8]	nibble1	0x0	
[7:4]	unused0	0x0	unused
[3:0]	nibble0	0x0	write something useful for nibble0

reg8

Name reg8

Address 0x8

Reset Value 0x00000000

Access read-write

Description register with empty and no descriptions of the fields

Bits	Field name	Reset	Description
[31:12]	unused1	0x00000	unused
[11:8]	nibble1	0x0	
[7:4]	unused0	0x0	unused
[3:0]	nibble0	0x0	