SmartDesign MSS

I/O Editor

Microsemi

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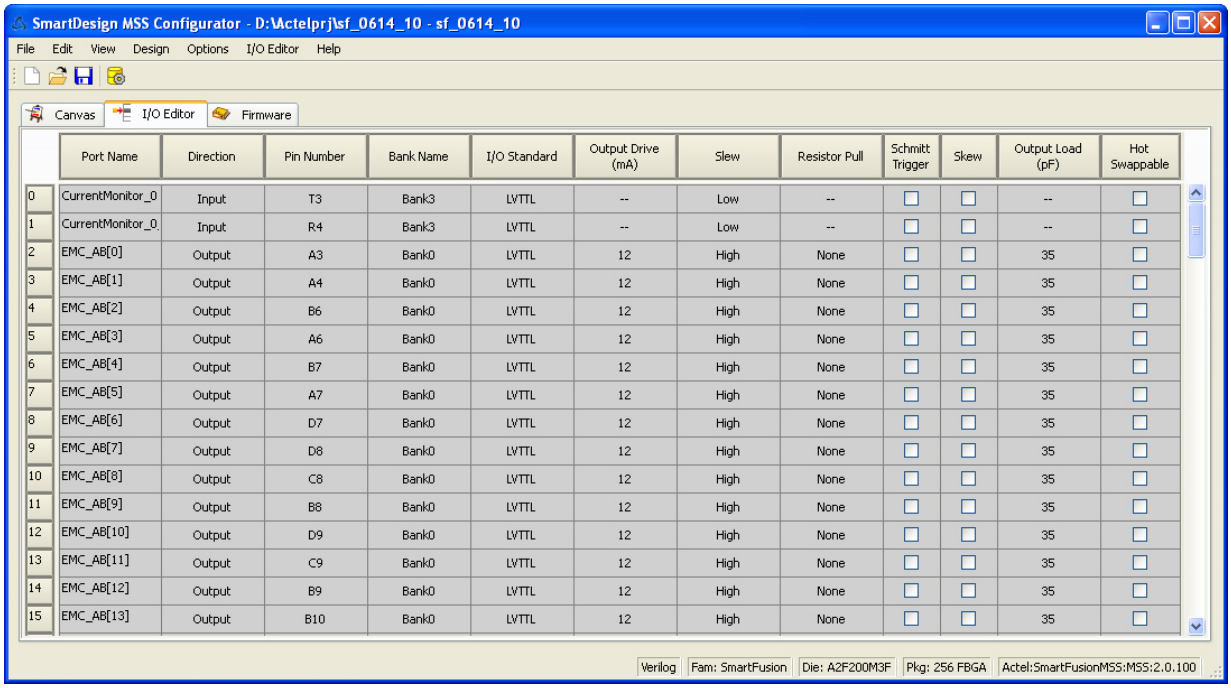
The SmartDesign MSS Configurator is a specialized SmartDesign for MSS configuration. If you are familiar with SmartDesign then the MSS Configurator will be very familiar.

The I/O Editor is a specialized I/O attribute editor for MSS I/O pins. Only the MSS I/O pins are editable in this table, regular FPGA I/Os are shown but do not contain any editable attributes (as shown in Figure 1).



	Port Name	Direction	Pin Number	Bank Name	I/O Standard	Output Drive (mA)	Slew	Resistor Pull	Schmitt Trigger	Skew	Output Load (pF)	Hot Swappable
0	CurrentMonitor_0	Input	T3	Bank3	LVTTL	--	Low	--	☐	☐	--	☐
1	CurrentMonitor_0	Input	R4	Bank3	LVTTL	--	Low	--	☐	☐	--	☐
2	EMC_AB[0]	Output	A3	Bank0	LVTTL	12	High	None	☐	☐	35	☐
3	EMC_AB[1]	Output	A4	Bank0	LVTTL	12	High	None	☐	☐	35	☐
4	EMC_AB[2]	Output	B6	Bank0	LVTTL	12	High	None	☐	☐	35	☐
5	EMC_AB[3]	Output	A6	Bank0	LVTTL	12	High	None	☐	☐	35	☐
6	EMC_AB[4]	Output	B7	Bank0	LVTTL	12	High	None	☐	☐	35	☐
7	EMC_AB[5]	Output	A7	Bank0	LVTTL	12	High	None	☐	☐	35	☐
8	EMC_AB[6]	Output	D7	Bank0	LVTTL	12	High	None	☐	☐	35	☐
9	EMC_AB[7]	Output	D8	Bank0	LVTTL	12	High	None	☐	☐	35	☐
10	EMC_AB[8]	Output	C8	Bank0	LVTTL	12	High	None	☐	☐	35	☐
11	EMC_AB[9]	Output	B8	Bank0	LVTTL	12	High	None	☐	☐	35	☐
12	EMC_AB[10]	Output	D9	Bank0	LVTTL	12	High	None	☐	☐	35	☐
13	EMC_AB[11]	Output	C9	Bank0	LVTTL	12	High	None	☐	☐	35	☐
14	EMC_AB[12]	Output	B9	Bank0	LVTTL	12	High	None	☐	☐	35	☐
15	EMC_AB[13]	Output	B10	Bank0	LVTTL	12	High	None	☐	☐	35	☐

***Figure 1* • MSS I/O View**

The I/O Editor only displays the attributes that are relevant for MSS I/Os. The read-only values are shown with a gray background.

MSS I/Os must be configured inside the SmartDesign MSS Configurator. In Designer and SmartDesign I/O editor, all MSS I/O attributes are read-only.

Changing I/O Bank Settings

To access the I/O Bank settings in your MSS design you must click the I/O Editor tab in the MSS configurator, and from the I/O Editor menu choose **I/O Bank Settings**.

You can use the I/O Bank Settings dialog box to change the VCCI of the banks where the MSS I/Os are placed - the East (Bank 2) and West (Bank 4) MSS I/O banks (as shown in Figure 2).

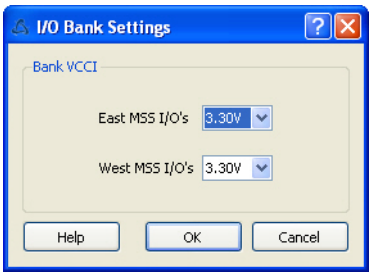


Figure 2 • **I/O Bank Settings**

These settings cannot be changed in Designer software.

You have four options: 1.50V; 1.80V; 2.50V; 3.30V

When changing the VCCI the MSS I/Os placed on this bank will change the I/O standard to match the new VCCI; this is done automatically.

The I/O standard is changed as follows:

- 3.30V: MSS I/Os placed on this bank are changed to LVTTL. You may change the I/O standard to LVCMOS 3.3V for each MSS I/O individually using the I/O editor.
- 2.50V: MSS I/Os placed on this bank are changed to LVCMOS 2.5V
- 1.80V: MSS I/Os placed on this bank are changed to LVCMOS 1.8V
- 1.50V: MSS I/Os placed on this bank are changed to LVCMOS 1.5V

I/O Editor Menu

Table 1 • **I/O Editor Menu**

Command	Icon	Shortcut	Function
I/O Bank Settings			Displays the I/O Bank Settings dialog box, in which you can assign technologies and VREF pins to your I/O banks (see above)

A – Product Support

The Microsemi SoC Products Group backs its products with various support services including a Customer Technical Support Center and Non-Technical Customer Service. This appendix contains information about contacting the SoC Products Group and using these support services.

Contacting the Customer Technical Support Center

Microsemi staffs its Customer Technical Support Center with highly skilled engineers who can help answer your hardware, software, and design questions. The Customer Technical Support Center spends a great deal of time creating application notes and answers to FAQs. So, before you contact us, please visit our online resources. It is very likely we have already answered your questions.

Technical Support

Microsemi customers can receive technical support on Microsemi SoC products by calling Technical Support Hotline anytime Monday through Friday. Customers also have the option to interactively submit and track cases online at My Cases or submit questions through email anytime during the week.

Web: www.actel.com/mycases

Phone (North America): 1.800.262.1060

Phone (International): +1 650.318.4460

Email: soc_tech@microsemi.com

ITAR Technical Support

Microsemi customers can receive ITAR technical support on Microsemi SoC products by calling ITAR Technical Support Hotline: Monday through Friday, from 9 AM to 6 PM Pacific Time. Customers also have the option to interactively submit and track cases online at My Cases or submit questions through email anytime during the week.

Web: www.actel.com/mycases

Phone (North America): 1.888.988.ITAR

Phone (International): +1 650.318.4900

Email: soc_tech_itar@microsemi.com

Non-Technical Customer Service

Contact Customer Service for non-technical product support, such as product pricing, product upgrades, update information, order status, and authorization.

Microsemi's customer service representatives are available Monday through Friday, from 8 AM to 5 PM Pacific Time, to answer non-technical questions.

Phone: +1 650.318.2470

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