Updating to the AD9364

RF Transceiver	LO tuning range	Bandwidth	Number Channels
AD9363 (Default ADALM-PLUTO)	325 - 3800 MHz	20 MHz	2 Rx, 2 Tx
AD9364	70 - 6000 MHz	56 MHz	1 Rx, 1 Tx
AD9361	70 - 6000 MHz	56 MHz	2 Rx, 2 Tx

There were some early PlutoSDR devices which use the AD9364, which is nearly identical to the AD9363 used the production builds. If you have one of the AD9364 based PlutoSDR devices, it's a quick matter of using the U-Boot's fw_printenv and fw_setenv commands to get that device's larger tuning range (70-6000 MHz) and larger bandwidth (56MHz).
From your favorite serial application (Windows, Linux or macos), just open a serial connection (or ssh to 192.168.2.1, Windows, Linux or macos) to the PlutoSDR. The username is `root` and the password is `analog`.

`fw_setenv` takes a `name` and `value` pair. Depending on the revision of firmware/hardware that you have, different `name` and `values` are enabled.

Revision B / All Firmware versions

Control	Default	min FW Version	HW Rev	`name` `value` pairs	configuration meaning
Tuning Range	Y	All	B/C	`attr_name <blank>` `attr_val <blank>`	tuning range is 325 - 3800 MHz 1r1t or 2r2t

		All	B/C	`attr_name`
				`compatible`
				`attr_val ad9364`
					tuning range is 70 - 6000 MHz
					1r1t only

		0.32	C	`attr_name`
				`compatible`
				`attr_val ad9361`
					tuning range is 70 - 6000 MHz
					1r1t or 2r2t

Number of channels	Y	0.32	B/C	`mode 1r1t`	1 Rx, 1 Tx, 61.44 MSPS max data rate
		0.32	C	`mode 2r2t`	2 Rx, 2 Tx, 30.72 MSPS max data rate (requires ad9363 or AD9361 settings)

To learn more about how these are managed, and other settings, check out the Boot Magic Explained docs.

Example

This will be the default (based on the AD9363):

This specifies any shell prompt running on the target. The `#` is the prompt, and the **`bold`** is what you type

```
# fw_printenv attr_name
## Error: "attr_name" not defined
# fw_printenv attr_val
## Error: "attr_val" not defined
#
```

To change things to the AD9364 configuration:

This specifies any shell prompt running on the target. The `#` is the prompt, and the **`bold`** is what you type

```
# fw_setenv attr_name compatible
# fw_setenv attr_val ad9364
# reboot
```

Starting with PlutoSDR firmware revision **v0.32** an additional variable should be set:

This specifies any shell prompt running on the target. The `#` is the prompt, and the **`bold`** is what you type

```
# fw_setenv compatible ad9364
# reboot
```

Note that when setting the mode of a Rev. C PlutoSDR to `2r2t`, the following would be sequence of commands:

This specifies any shell prompt running on the target. The `#` is the prompt, and the **`bold`** is what you type

```
# fw_setenv attr_name compatible
# fw_setenv attr_val ad9361
# fw_setenv compatible ad9361
# fw_setenv mode 2r2t
# reboot
```

To learn more about resetting, check out the developer documentation.
After rebooting the device, this is what the AD9364 configuration looks like:

This specifies any shell prompt running on the target. The `#` is the prompt, and the `bold` is what you type

```
Welcome to Pluto
pluto login: root
Password: analog
# fw_printenv attr_name
attr_name=compatible
# fw_printenv attr_val
attr_val=ad9364
#
```

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Source: https://wiki.analog.com/university/tools/pluto/users/customizing