






**[ADESCOM-272] wiped bias current config memory in MPIFR PAF** Created: 05/May/17 Updated: 11/May/17

<b>Status:</b>	Closed
<b>Project:</b>	<a href="#">ADE-SCOM</a>
<b>Component/s:</b>	None
<b>Affects Version/s:</b>	None
<b>Fix Version/s:</b>	None

<b>Type:</b>	Bug	<b>Priority:</b>
<b>Reporter:</b>	<a href="#">Chippendale, Aaron (CASS, Marsfield)</a>	<b>Assignee:</b>
<b>Resolution:</b>	Complete	<b>Votes:</b>
<b>Labels:</b>	PAFonEffelsberg	
<b>Remaining Estimate:</b>	Not Specified	
<b>Time Spent:</b>	Not Specified	
<b>Original Estimate:</b>	Not Specified	

<b>Attachments:</b>	 image002.png  MPI_rfof_tx_setting1.csv  Screenshot of Screenshot of PAF-EFF at 2017-05-09 220803.png  Screenshot of Screenshot of PAF-EFF at 2017-05-09 224341.png  serial_number	
<b>Issue Links:</b>	<b>Related To</b> relates to <a href="#">ADESCOM-27</a> ak02 MRO so:	
<b>Tagged:</b>	False	
<b>Planning:</b>	Unplanned	
<b>Epic Link:</b>	<a href="#">PAF on Effelsberg</a>	
<b>Planned Start:</b>	05/May/17	
<b>Planned End:</b>	05/May/17	
<b>Actual End:</b>	09/May/17 11:15 PM	

### Description

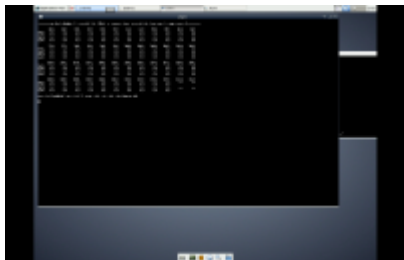
The bias current config memory is wiped on all four backplanes on the MPIFR PAF. This appears to be preventing successful PAF startup at Bonn.

ping [Deng, Xinping \(Max Planck Institute for Radioastronomy\)](#), [Deng, Xinping \(Max Planck Institute Marsfield\)](#), [Brothers, Mike \(CASS, Marsfield\)](#)

### Comments

Comment by [Chippendale, Aaron \(CASS, Marsfield\)](#) [05/May/17]

This screenshot shows that the PAF bias current config memory has been wiped on all backplanes



This manifests in startup errors:

```

2017-05-05 12:43:38.785 INFO [ 0x7f292d57a700] askap.ioc.ade_paf.adbe.PafController ac
Startup:pafCtrlComms: PAF Controller Communications OK (Serial No)
2017-05-05 12:43:39.885 INFO [ 0x7f292d57a700] askap.ioc.ade_paf.adbe.PafController ac
Relative Humidity Sensor power enabled
2017-05-05 12:43:42.152 INFO [ 0x7f292d57a700] askap.ioc.ade_paf.adbe.PafController ac
Controller hardware alarms disabled:
2017-05-05 12:43:44.313 INFO [ 0x7f292d57a700] askap.ioc.ade_paf.adbe.PafController ac
Controller current hardware alarms : Elect interlock open
2017-05-05 12:43:45.313 INFO [ 0x7f292d57a700] askap.ioc.ade_paf.adbe.PafController ac
Power Supply not present
2017-05-05 12:43:45.314 INFO [ 0x7f292d57a700] askap.ioc.ade_paf.adbe.PafController ac
not present
2017-05-05 12:43:46.314 INFO [ 0x7f292d57a700] askap.ioc.ade_paf.adbe.PafController ac
up Backplane 1
2017-05-05 12:43:53.631 INFO [ 0x7f292d57a700] askap.ioc.ade_paf.adbe.PafController ac
up Backplane 2
2017-05-05 12:44:00.643 INFO [ 0x7f292d57a700] askap.ioc.ade_paf.adbe.PafController ac
up Backplane 3
2017-05-05 12:44:07.965 INFO [ 0x7f292d57a700] askap.ioc.ade_paf.adbe.PafController ac
up Backplane 4
2017-05-05 12:44:15.001 INFO [ 0x7f292d57a700] askap.ioc.ade_paf.adbe.PafController ac
Configuring dominos
2017-05-05 12:44:15.007 ERROR [ 0x7f292d57a700] askap.ioc.ade_paf.adbe.PafController ac

```

Comment by [Chippendale, Aaron \(CASS, Marsfield\)](#) [05/May/17]

For now we follow the workaround in [ADESCOM-27](#) of unchecking the optical startup enable. This results in bias currents that are falling off the low end of the acceptable range. This is good enough

Comment by [Chippendale, Aaron \(CASS, Marsfield\)](#) [05/May/17]

Here's the domino serial numbers in the MPIFR PAF: [serial\\_numbers.csv](#)

Comment by [Chippendale, Aaron \(CASS, Marsfield\)](#) [06/May/17]

[Cheng, Wan \(CASS, Marsfield\)](#) and [Beresford, Ron \(CASS, Marsfield\)](#), could you please help us get the dominos with the above serial numbers?

Comment by [Chippendale, Aaron \(CASS, Marsfield\)](#) [08/May/17]

If we can get the settings documented during ATE into a .csv file then it is possible to upload the settings via the **PAF Power-up** sub menu and then choose **PAF Domino Optical Power Reload**. The settings have

1. Backplane No
2. Domino No

3. Domino SN
4. RFoF\_Tx SN
5. CH1optPwrCtrlMemMon
6. CH2optPwrCtrlMemMon

I've already put the serial numbers in the attached [serial\\_numbers.csv](#).

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Comment by [Beresford, Ron \(CASS, Marsfield\)](#) [09/May/17]

Got it! 😊👍

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Comment by [Cheng, Wan \(CASS, Marsfield\)](#) [09/May/17]

Hi Ron:

Please see the attached.

Wan

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Comment by [Beresford, Ron \(CASS, Marsfield\)](#) [09/May/17]

thanks Wan.

Did you have two or three remaining in the production database? There were the two MPI spares a

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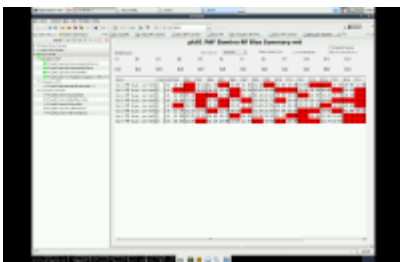
Comment by [Chippendale, Aaron \(CASS, Marsfield\)](#) [09/May/17]

Thanks [Cheng, Wan \(CASS, Marsfield\)](#) and [Beresford, Ron \(CASS, Marsfield\)](#). I'll try uploading these how it goes.

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Comment by [Chippendale, Aaron \(CASS, Marsfield\)](#) [09/May/17]

Domino RF Bias currents before fixing the bias settings:

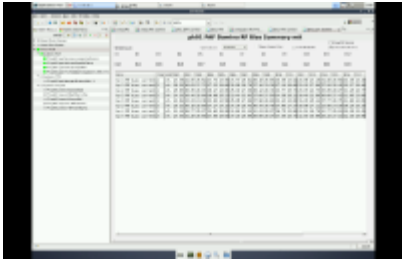
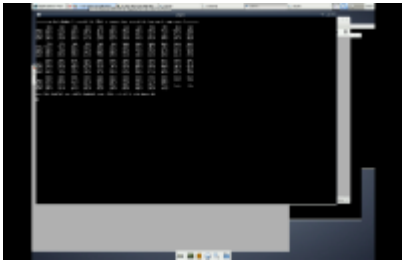


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Comment by [Chippendale, Aaron \(CASS, Marsfield\)](#) [09/May/17]

I just uploaded the settings [Cheng, Wan \(CASS, Marsfield\)](#) provided via this file [serial\\_numbers\\_up](#) Reload option in the *Test PAF Power-up* sub-menu of `pa f . py`.

Following that we get sensible readback of the bias settings and reasonable bias currents as show



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Comment by [Chippendale, Aaron \(CASS, Marsfield\)](#) [09/May/17]

The Domino bias settings have been reloaded, but we should double check that they are persistent.

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Comment by [Chippendale, Aaron \(CASS, Marsfield\)](#) [10/May/17]

The PAF was just power cycled and the domino bias settings were persistent.

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Comment by [Brothers, Mike \(CASS, Marsfield\)](#) [11/May/17]

We have a safeguard in the ASKAP PAFs that we monitor the PSU voltages during start-up. MPI confirms their PAF PSU.

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