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Repairs and updates of the VMEbus SBCs of ATLAS

Introduction

There are two generations of SBCs in use by ATLAS:

- VP717 / VP917
 - ◆ These SBCs are still fully supported and have no known issues. In case of a malfunction they can of course still be repaired.
- VPE-24
 - ◆ This type of SBCs is based on the Intel Atom CPU. CPUs that have been produced before January 2019 have a known issue that may lead to a failure of the CPU at any time. More than 10 SBCs have already failed in this way. In order to prevent problems during run 3 it is strongly recommended to have the CPUs replaced preventively.

Note: SBCs of type VP-110 and VP-315 are no longer supported and cannot be repaired.

Is my SBC concerned?

Note: Only VP-E24 SBCs with an Atom processor of the "D0" step have to be updated.

There is a Linux command to read a PCI configuration register which will show whether a D0 step or D1 step processor is installed. The command is:

```
sudo setpci -s 00:1f.0 f8.1
```

D0: 0x01110F1A

D1: 0x01130F1A

Note: Users may not have the sudo privilege required to run the command. Contact Markus Joos.

Repair / update logistics FAQ

Q: Do I have to have my SBC updated

A: No, the update is not mandatory. But be aware that a D0 CPU may fail at any moment

Q: How much will the update cost and who pays?

A: The preventive replacement of the CPU costs GBP 500. You have to provide a budget code.

Q: How long will it take to have my SBC updated

A: CCT has a turn around time of ~4 weeks (shipping included). As their capacity is limited (10 cards per week) cards will be sent in batches

Q: Can I have a spare SBCs as a temporary replacement?

A: It depends. ATLAS has a small stock of spares [☞](#). Spares will be provided if available

List of SBCs waiting to be sent

Owner	Budget code for repair	Serial number	IP-name	D0 CPU confirmed	Preferred shipping date	Remark
Rhys Owen	TBD	TBD	sbcl1c-test-00, sbcl1c-test-02, sbcl1c-stf-00, sbcl1c-stf-01	no	later	To be sent in two batches of two if they will have to be update them
Antoine Marzin	32137	TBD	6 SBCs	not yet	May	

List of SBCs that went for a repair / preventive replacement of the CPU

EDH	Shipping date	RMA	Serial number	Owner	Budget code for repair	IP-name	D0 CPU confirmed	Remarks
9080762	xx.x.2022	110036	M26420/030	Antoine Marzin	32137	sbc11ct-28	yes	-
8920860	20.10.2021	109957	M27080/086	M. Joos (spare SBCs)	T575080	n/a	yes	CPU preventive replacement
8920860	20.10.2021	109957	M27080/088	M. Joos (spare SBCs)	T575080	n/a	yes	CPU preventive replacement
8920860	20.10.2021	109957	M28620/002	M. Joos (spare SBCs)	T575080	n/a	yes	CPU preventive replacement
8920860	20.10.2021	109957	M28620/004	M. Joos (spare SBCs)	T575080	n/a	yes	CPU preventive replacement
8853963	12.8.2021	109908	M27080/076	M. Joos (spare SBCs)	T575080	n/a	yes	CPU preventive replacement
8853963	12.8.2021	109908	M27080/078	M. Joos (spare SBCs)	T575080	n/a	yes	CPU preventive replacement
8853963	12.8.2021	109908	M28620/001	M. Joos (spare SBCs)	T575080	n/a	yes	CPU preventive replacement
8853963	12.8.2021	109908	M28620/003	M. Joos (spare SBCs)	T575080	n/a	yes	CPU preventive replacement
8853963	12.8.2021	109908	M28620/005	M. Joos (spare SBCs)	T575080	n/a	yes	CPU preventive replacement
8853963	12.8.2021	109908	M28620/006	M. Joos (spare SBCs)	T575080	n/a	yes	CPU preventive replacement
8853963	12.8.2021	109908	M27080/003	G. Brandt	T577020	SBC-PIX-RCC-I-1	yes	CPU preventive replacement
8847935	26.7.2021	109904	M27080/030	D. Ponomarenko	T577040	n/a	n/a	Card is broken
8795942	22.6.2021	109867	M26420/050	D. Ponomarenko	n/a	n/a	n/a	Sent for investigation of the OS instability
8795942	22.6.2021	109867	M26420/038	G. Brandt	n/a	n/a	n/a	Sent for investigation of the OS instability
8795942	22.6.2021	109867	M27080/038	R. Owen	n/a	n/a	n/a	

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								Sent for investiga of the OS instability
8795942	22.6.2021	109867	M27080/096	S. Franchino	n/a	n/a	n/a	Broken
8730244	26.5.2021	109820	M26420/028	Vladimir Ryjov	32137	sbc11ct-20	by serial number	CPU preventiv replacem
8730244	26.5.2021	109820	M30201/007	Carla Sbarra	T577200	-	n/a	Card brok (CPU dea
8730244	26.5.2021	109820	M26420/029	Antoine Marzin	32137	-	by serial number	CPU preventiv replacem
8730244	26.5.2021	109820	M27080/102	Antoine Marzin	32137	-	by serial number	CPU preventiv replacem
8730244	26.5.2021	109820	M26420/021	Antoine Marzin	32137	-	by serial number	CPU preventiv replacem
8730244	26.5.2021	109820	M27080/063	Antoine Marzin	32137	-	by serial number	CPU preventiv replacem
8669122	16.4.2021	109755	M26420/005	Claudio Luci	T550602	SBC-MDT-RCC-ECA-01	by serial number	CPU preventiv replacem
8669122	16.4.2021	109755	M26420/006	Claudio Luci	T550602	SBC-MDT-RCC-ECA-02	by serial number	CPU preventiv replacem
8669122	16.4.2021	109755	M26420/008	Claudio Luci	T550602	SBC-MDT-RCC-ECA-03	by serial number	CPU preventiv replacem
8669122	16.4.2021	109755	M26420/009	Claudio Luci	T550602	SBC-RPC-LVL1-RCC-14	by serial number	CPU preventiv replacem
8669122	16.4.2021	109755	M26420/010	Claudio Luci	T550602	SBC-MDT-RCC-ECA-04	by serial number	CPU preventiv replacem
8669122	16.4.2021	109755	M26420/011	Claudio Luci	T550602	SBC-MDT-RCC-ECC-01	by serial number	CPU preventiv replacem
8669122	16.4.2021	109755	M26420/012	Claudio Luci	T550602	SBC-MDT-RCC-ECC-02	by serial number	CPU preventiv replacem
8669122	16.4.2021	109755	M26420/013	Claudio Luci	T550602	SBC-RPC-LVL1-RCC-15	by serial number	CPU preventiv replacem
8669122	16.4.2021	109755	M26420/014	Claudio Luci	T550602	SBC-MDT-RCC-ECC-03	by serial number	CPU preventiv replacem
8669122	16.4.2021	109755	M26420/015	Claudio Luci	T550602	SBC-MDT-RCC-ECC-04	by serial number	CPU preventiv replacem

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8669121	19.3.2021	109754	M25216/012	Dave Robinson	T577010	SBC-BCM-TCC-02	by serial number	CPU preventive replacement
8669121	19.3.2021	109754	M25216/013	Dave Robinson	T577030	n/a	by serial number	CPU preventive replacement
8669121	19.3.2021	109754	M26420/033	Dave Robinson	T577030	SBCSCT-RCC-04	by serial number	CPU preventive replacement
8669121	19.3.2021	109754	M26420/035	Dave Robinson	T577030	n/a	by serial number	CPU preventive replacement
8669121	19.3.2021	109754	M26420/037	Dave Robinson	T577030	n/a	by serial number	CPU preventive replacement
8669121	19.3.2021	109754	M27050/055	Dave Robinson	T577010	SBC-BCM-TCC-01	by serial number	CPU preventive replacement
8669121	19.3.2021	109754	M25216/019	Claudio Luci	T550602	sbc-rpc-lvl1-rcc-09	by serial number	CPU preventive replacement
8669121	19.3.2021	109754	M27080/058	Claudio Luci	T550602	sbc-rpc-lvl1-rcc-02	by serial number	CPU preventive replacement
8669121	19.3.2021	109754	M26420/026	Claudio Luci	T550602	sbc-rpc-lvl1-rcc-03	by serial number	CPU preventive replacement
8669121	19.3.2021	109754	M26420/043	Claudio Luci	T550602	sbc-rpc-lvl1-rcc-04	by serial number	CPU preventive replacement
8669121	19.3.2021	109754	M26420/016	Claudio Luci	T550602	sbc-rpc-lvl1-rcc-05	by serial number	CPU preventive replacement
8669121	19.3.2021	109754	M26420/017	Claudio Luci	T550602	sbc-rpc-lvl1-rcc-06	by serial number	CPU preventive replacement
8669121	19.3.2021	109754	M26420/018	Claudio Luci	T550602	sbc-rpc-lvl1-rcc-07	by serial number	CPU preventive replacement
8669121	19.3.2021	109754	M26420/025	Claudio Luci	T550602	sbc-rpc-lvl1-rcc-08	by serial number	CPU preventive replacement
8669121	19.3.2021	109754	M26420/019	Claudio Luci	T550602	sbc-rpc-lvl1-rcc-12	by serial number	CPU preventive replacement
8669121	19.3.2021	109754	M26420/024	Claudio Luci	T550602	sbc-rpc-lvl1-rcc-13	by serial number	CPU preventive replacement
8669120	12.3.2021	109753	M25216/014	Claudio Luci	T550602	sbc-mdt-rcc-ba-01	by serial number	CPU preventive replacement
8669120	12.3.2021	109753	M25216/015	Claudio Luci	T550602	sbc-mdt-rcc-ba-02	by serial number	CPU preventive replacement

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8669120	12.3.2021	109753	M25216/016	Claudio Luci	T550602	sbc-mdt-rcc-ba-03	by serial number	CPU preventiv replacem
8669120	12.3.2021	109753	M25216/017	Claudio Luci	T550602	sbc-mdt-rcc-ba-04	by serial number	CPU preventiv replacem
8669120	12.3.2021	109753	M26420/001	Claudio Luci	T550602	sbc-mdt-rcc-bc-01	by serial number	CPU preventiv replacem
8669120	12.3.2021	109753	M26420/002	Claudio Luci	T550602	sbc-mdt-rcc-bc-02	by serial number	CPU preventiv replacem
8669120	12.3.2021	109753	M26420/003	Claudio Luci	T550602	sbc-mdt-rcc-bc-03	by serial number	CPU preventiv replacem
8669120	12.3.2021	109753	M26420/004	Claudio Luci	T550602	sbc-mdt-rcc-bc-04	by serial number	CPU preventiv replacem
8669120	12.3.2021	109753	M26420/020	Claudio Luci	T550602	sbc-rpc-lvl1-rcc-11	by serial number	CPU preventiv replacem
8669120	12.3.2021	109753	M26420/022	Claudio Luci	T550602	sbc-rpc-lvl1-rcc-10	by serial number	CPU preventiv replacem
8644461	3.3.2021	109749	M27080/098	Tomoyuki Saito	T575080	sbc-tgc-tcc-eca-01	via serial number	CPU preventiv replacem
8644461	3.3.2021	109749	M27080/077	Tomoyuki Saito	T577140	sbc-tgc-cci-eca-01	via serial number	CPU preventiv replacem
8644461	3.3.2021	109749	M27080/059	Tomoyuki Saito	T577140	sbc-tgc-cci-eca-02	via serial number	CPU preventiv replacem
8644461	3.3.2021	109749	M27080/083	Tomoyuki Saito	T577140	sbc-tgc-cci-eca-03	via serial number	CPU preventiv replacem
8644461	3.3.2021	109749	M27080/085	Tomoyuki Saito	T577140	sbc-tgc-cci-eca-04	via serial number	CPU preventiv replacem
8644461	3.3.2021	109749	M27080/069	Tomoyuki Saito	T577140	sbc-tgc-rcc-eca-01	via serial number	CPU preventiv replacem
8644461	3.3.2021	109749	M27080/070	Tomoyuki Saito	T577140	sbc-tgc-rcc-eca-02	via serial number	CPU preventiv replacem
8644461	3.3.2021	109749	M25216/018	Tomoyuki Saito	T577140	sbc-tgc-csl-lvl1-04	via serial number	CPU preventiv replacem
8644461	3.3.2021	109749	M27080/064	Tomoyuki Saito	T577140	sbc-tgc-csl-lvl1-05	via serial number	CPU preventiv replacem
8644461	3.3.2021	109749	M27080/065		T577140	sbc-tgc-csl-lvl1-06		

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				Tomoyuki Saito			via serial number	CPU preventiv replacem
8606549	9.2.2021	109720	M26420/027	Antoine Marzin	T575080	SBC-TDQ-RF2TTC-03	via serial number	CPU preventiv replacem
8606549	9.2.2021	109720	M26420/031	Ralf Spiwoks	32137	SBCL1CT-29	yes	CPU preventiv replacem
8606549	9.2.2021	109720	M26420/048	Daniil Ponomarenko	T577040	SBCTRT-VME-11	via serial number	CPU preventiv replacem
8606549	9.2.2021	109720	M26420/049	Daniil Ponomarenko	T577040	SBCTRT-RCC-01	via serial number	CPU preventiv replacem
8606549	9.2.2021	109720	M26420/050	Daniil Ponomarenko	T577040	SBCTRT-TCC-01	via serial number	CPU preventiv replacem
8606549	9.2.2021	109720	M27080/024	Daniil Ponomarenko	T577040	SBC-TRT-RCC-E-03	via serial number	CPU preventiv replacem
8606549	9.2.2021	109720	M27080/025	Daniil Ponomarenko	T577040	SBC-TRT-RCC-E-05	via serial number	CPU preventiv replacem
8606549	9.2.2021	109720	M27080/026	Daniil Ponomarenko	T577040	SBC-TRT-RCC-E-06	via serial number	CPU preventiv replacem
8606549	9.2.2021	109720	M27080/035	Rhys Owen	T577300	SBC-L1C-CCC-00	via serial number	CPU preventiv replacem
8606549	9.2.2021	109720	M27080/036	Rhys Owen	T577300	SBC-L1C-CCC-01	via serial number	CPU preventiv replacem
8606549	9.2.2021	109720	M27080/038	Rhys Owen	T577300	SBC-L1C-CCC-02	via serial number	CPU preventiv replacem
8606549	9.2.2021	109720	M27080/039	Rhys Owen	T577300	SBC-L1C-CCC-03	via serial number	CPU preventiv replacem
8606549	9.2.2021	109720	M27080/040	Rhys Owen	T577300	SBC-L1C-JCC-00	via serial number	CPU preventiv replacem
8606549	9.2.2021	109720	M27080/050	Rhys Owen	T577300	00409e042152	via serial number	CPU preventiv replacem
8606549	9.2.2021	109720	M27080/051	Rhys Owen	T577300	SBC-L1C-CCC-02	via serial number	CPU preventiv replacem
8606549	9.2.2021	109720	M27080/061	Antoine Marzin	T575080	SBC-TDQ-CTP-02	via serial number	CPU preventiv replacem
8606549	9.2.2021	109720	M27080/062	Antoine Marzin	T575080	SBC-MUCTPI-TCC-02	via serial number	CPU preventiv

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8606549	9.2.2021	109720	M27080/096	Rhys Owen	T577300	00409e0421ae	via serial number	CPU preventiv replacem
8606549	9.2.2021	109720	M27080/099	Antoine Marzin	T575080	SBCBB5-DAQ02	via serial number	CPU preventiv replacem
8606549	9.2.2021	109720	M27080/101	Antoine Marzin	32137	SBCL1CT-27	via serial number	CPU preventiv replacem
8596999	20.1.2021	109712	M26420/032	Dave Robinson	T577030	SBC-SCT-RCC-BC-03	via serial number	CPU preventiv replacem
8596999	20.1.2021	109712	M26420/034	Koichi Nagai	T577030	SBCSCT-RCC-05	via serial number	CPU preventiv replacem
8596999	20.1.2021	109712	M26420/036	Dave Robinson	T577030	SBC-SCT-RCC-BA-03	via serial number	CPU preventiv replacem
8596999	20.1.2021	109712	M27080/013	Dave Robinson	T577030	SBC-SCT-TCC-02	via serial number	CPU preventiv replacem
8596999	20.1.2021	109712	M27080/015	Dave Robinson	T577030	SBC-SCT-RCC-BC-04	via serial number	CPU preventiv replacem
8596999	20.1.2021	109712	M27080/017	Dave Robinson	T577030	SBC-SCT-RCC-BA-04	via serial number	CPU preventiv replacem
8596999	20.1.2021	109712	M27080/018	Dave Robinson	T577030	SBC-SCT-RCC-ECA-03	via serial number	CPU preventiv replacem
8596999	20.1.2021	109712	M27080/019	Dave Robinson	T577030	SBC-SCT-RCC-ECA-04	via serial number	CPU preventiv replacem
8596999	20.1.2021	109712	M27080/021	Dave Robinson	T577030	SBC-SCT-RCC-ECC-03	via serial number	CPU preventiv replacem
8596999	20.1.2021	109712	M27080/022	Dave Robinson	T577030	SBC-SCT-RCC-ECC-04	via serial number	CPU preventiv replacem
8578330	7.1.2021	109703	M25216/020	Tomoyuki Saito	T577140	SBC-TGC-CSL-LVL1-03	via serial number	CPU preventiv replacem
8578330	7.1.2021	109703	M26420/044	Tomoyuki Saito	T575080	SBC-TGC-TCC-ECC-01	via serial number	CPU preventiv replacem
8578330	7.1.2021	109703	M26420/045	Tomoyuki Saito	T577140	SBC-TGC-CSL-LVL1-02	via serial number	CPU preventiv replacem
8578330	7.1.2021	109703	M26420/052	Tomoyuki Saito	T577140	SBC-TGC-CCI-ECC-01	via serial number	CPU preventiv replacem
8578330	7.1.2021	109703	M27080/047		T577140	SBC-TGC-CSL-LVL1-01		

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				Tomoyuki Saito			via serial number	CPU preventiv replacem
8578330	7.1.2021	109703	M27080/072	Tomoyuki Saito	T577140	SBC-TGC-RCC-ECC-01	via serial number	CPU preventiv replacem
8578330	7.1.2021	109703	M27080/075	Tomoyuki Saito	T577140	SBC-TGC-RCC-ECC-02	via serial number	CPU preventiv replacem
8578330	7.1.2021	109703	M27080/091	Tomoyuki Saito	T577140	SBC-TGC-CCI-ECC-02	via serial number	CPU preventiv replacem
8578330	7.1.2021	109703	M27080/093	Tomoyuki Saito	T577140	SBC-TGC-CCI-ECC-03	via serial number	CPU preventiv replacem
8578330	7.1.2021	109703	M27080/095	Tomoyuki Saito	T577140	SBC-TGC-CCI-ECC-04	via serial number	CPU preventiv replacem
8557801	11.12.2020	109691	M27080/023	Daniil Ponomarenko	T577040	sbc-trt-rcc-e-01	via serial number	CPU preventiv replacem
8557801	11.12.2020	109691	M27080/027	Daniil Ponomarenko	T577040	sbc-trt-rcc-b-03	via serial number	CPU preventiv replacem
8557801	11.12.2020	109691	M27080/028	Daniil Ponomarenko	T577040	sbc-trt-rcc-b-01	via serial number	CPU preventiv replacem
8557801	11.12.2020	109691	M27080/029	Daniil Ponomarenko	T577040	sbc-trt-rcc-b-02	via serial number	CPU preventiv replacem
8557801	11.12.2020	109691	M27080/031	Daniil Ponomarenko	T577040	sbc-trt-tcc-01	via serial number	CPU preventiv replacem
8557801	11.12.2020	109691	M27080/032	Daniil Ponomarenko	T577040	sbc-trt-tcc-02	via serial number	CPU preventiv replacem
8557801	11.12.2020	109691	M27080/033	Daniil Ponomarenko	T577040	sbc-trt-rcc-e-04	via serial number	CPU preventiv replacem
8557801	11.12.2020	109691	M27080/034	Daniil Ponomarenko	T577040	sbc-trt-rcc-e-02	via serial number	CPU preventiv replacem
8557801	11.12.2020	109691	M27080/092	Daniil Ponomarenko	T577040	sbc-trt-rcc-b-04	via serial number	CPU preventiv replacem
8534894	1.12.2020	109678	M27080/041	Rhys Owen	T577300	n/a	via serial number	CPU preventiv replacem
8534894	1.12.2020	109678	M27080/042	Rhys Owen	T577300	n/a	via serial number	CPU preventiv replacem
8534894	1.12.2020	109678	M27080/043	Rhys Owen	T577300	n/a	via serial number	CPU preventiv

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8534894	1.12.2020	109678	M27080/045	Rhys Owen	T577300	n/a	via serial number	CPU preventiv replacem
8534894	1.12.2020	109678	M27080/046	Rhys Owen	T577300	n/a	via serial number	CPU preventiv replacem
8534894	1.12.2020	109678	M27080/048	Rhys Owen	T577300	n/a	via serial number	CPU preventiv replacem
8534894	1.12.2020	109678	M27080/049	Rhys Owen	T577300	n/a	via serial number	CPU preventiv replacem
8534894	1.12.2020	109678	M27080/071	Rhys Owen	T577300	n/a	via serial number	CPU preventiv replacem
8534894	1.12.2020	109678	M27080/002	Antoine Marzin	T577300	n/a	via serial number	CPU preventiv replacem
8534894	1.12.2020	109678	M27080/012	Antoine Marzin	T577300	n/a	via serial number	CPU preventiv replacem
8534894	1.12.2020	109678	M27080/056	Kris Korcyl	T577200	n/a	via serial number	CPU preventiv replacem
8534894	1.12.2020	109678	M26420/040	Gerhard Brandt	T577020	n/a	via serial number	CPU preventiv replacem
8534894	1.12.2020	109678	M26420/041	Gerhard Brandt	T577020	n/a	via serial number	CPU preventiv replacem
8490051	17.11.2020	109664	M27080/079	Wainer Vandelli (via Gerhard Brandt)	T575080		yes	CPU preventiv replacem
8490051	17.11.2020	109664	M27080/004	Gerhard Brandt	T577020		yes	CPU preventiv replacem
8490051	17.11.2020	109664	M27080/006	Gerhard Brandt	T577020		yes	CPU preventiv replacem
8490051	17.11.2020	109664	M27080/008	Gerhard Brandt	T577020		yes	CPU preventiv replacem
8490051	17.11.2020	109664	M27080/009	Gerhard Brandt	T577020		yes	CPU preventiv replacem
8490051	17.11.2020	109664	M27080/010	Gerhard Brandt	T577020		yes	CPU problem
8490051	17.11.2020	109664	M27080/011	Gerhard Brandt	T577020		yes	CPU preventiv replacem
8490051	17.11.2020	109664	M27080/044		T577300		yes	

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				Rhys Owen (L1Calo)				CPU problem
8490051	17.11.2020	109664	M27080/037	Rhys Owen (L1Calo)	T577300		yes	CPU problem
8468690	16.10.2020	109641	M27080/007	Gerhard Brandt	n/a			
8456167	13.10.2020	109640	M27080/082	Masato Aoki	n/a			
8449868	05.10.2020	109629	M27080/005	Gerhard Brandt	n/a			
8350165	17.07.2020	109555	M26420/023	Antoine Marzin	n/a			
8350165	17.07.2020	109555	M27080/101	Antoine Marzin	n/a			
8343271	15.07.2020	109550	M26420/051	C. Luci	n/a			
8318667	26.06.2020	109536	M27080/054	K. Korcyl	n/a			
8143171	05.02.2020	109392	M27080/089	K. Nagai	n/a			
8143171	05.02.2020	109392	M27080/016	K. Nagai	n/a			
8143171	05.02.2020	109392	M26420/047	C. Luci	n/a			
8143171	05.02.2020	109392	M27080/014	W. Vandelli	n/a			
8075529	10.12.2019	109330	M27080/001	Gerhard Brandt	n/a			
8016972	08.11.2019	109286	M27080/053	B. Barnett	n/a			
8016972	08.11.2019	109292	M30201/008	C. Sbarra	n/a			
8016972	08.11.2019	109292	M26420/038	Gerhard Brandt	n/a			
8016972	08.11.2019	109292	M26420/039	Gerhard Brandt	n/a			
7868089	12.07.2019	109185	M27080/074	B. Barnett	n/a			
7781352	15.05.2019	109120	M30201/008	C. Sbarra	n/a			

My SBC is back from repair. What next?

- Install the battery for the BIOS backup. You will find it in a bag in the box of the SBC.
- Connect the SBC to a screen and set these BIOS parameters:
 - ◆ Main -> System time
 - ◆ Main -> System date
 - ◆ Main -> Boot Features -> PXE boot -> Set to "enabled"
 - ◆ Main -> Boot Features -> Front Panel Eth A -> Set to "enabled"
 - ◆ Main -> Boot Features -> Front Panel Eth B -> Set to "enabled"
 - ◆ VME -> Outbound Reserved Size -> Set to 2 GB
 - ◆ Advanced -> Misc Configuration -> PCI MMIO Size -> 3GB.

Other issues (not necessarily CPU related)

Serial number / name	Owner	Remark
M27080/050	Silvia Franchino	Died during cosmic run on 10/10
M27080/053	Silvia Franchino	Inaccessible on 27.9
M27080/039	Silvia Franchino	Became inaccessible three times during operation on 23.7, 16.7, 8.9
M27080/051	Silvia Franchino	Became inaccessible twice during operation on 07.07
M27080/038	Rhys Owen	Became inaccessible twice on 05.6.
M27080/007	Gerhard Brandt	Got stuck in boot several times
M27080/005	Gerhard Brandt	Got stuck in boot several times
M27080/050	Rhys Owen	Became in accessible on 25.5.21 and again on 10.10.21
M26420/051	Claudio Luci	Crashed several times in USA15 (could not be reproduced in lab14)
M26420/036	Dave Robinson	Koichi Nagain: I think after the CPU update it crashed once in M6 and once sometime before when Dave and I worked on a Rod in the carte as far as I remember
M27080/082	Tomoyuki Saito	Tomoyuki Saito: There was a similar issue at the beginning of March. We could not access to the SBC suddenly. A crate power cycle was needed to recover it. It happened only once so far. MJ on 15.6.2021: This SBC has been working fine since the first (and so far only) glitch
M26420/051	Claudio Luci	Claudio Luci: I am having problems with this SBC since September
M26420/047 (not 100% confirmed)	Claudio Luci	Claudio Luci: Occasional problems
4 cards sbc-pix-* as described here ↗	Gerhard Brandt	Gerhard Brandt: From pixel we've added four repaired SBCs with unexpected downtime to the spreadsheet circulated in the ATLAS run meeting
unclear	Rhys Owen	Rhys Owen: The only "interesting" feature so far from the LICalo side was that ~10 mins after the very first booting the SBCs lost their NFS mount so became unable to login/operate requiring a reboot (using the front panel reset as we were there). After that they have been stable (so far).
M27080/101	Antoine Marzin	crashed twice on April 23 at 1pm and on May 23 at 14:21. The other SBC in the same VME crate was still working fine. The SBC recovered after a power cycling of the VME crate
sbc-trt-rcc-e-02	Daniil Ponomarenko	Has frozen twice so far (OK after reboot)

-- MarkusJoos - 2020-11-12

This topic: [Sandbox > AtlasSbcRepair](#)
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