



# **Arrow Lake S Intel® Platform for Linux\* Kernel 6.11**

## **Validation Report**

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***WW46, November 2024***



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## ***Revision History***

Revision	Description	Revision Date
WW46, 2024	<ul style="list-style-type: none"><li>Initial Release</li></ul>	November 2024

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# ***1 Overview***

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This document provides the complete validation details performed on MTL-S S02 1D CRB FAB3 RVP with B0+A2 silicon's.

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## 2 Configuration

<b>OS</b>	<a href="#">Ubuntu-24.04</a>
<b>Kernel</b>	<a href="#">6.11-arl-ww40bkc</a> Base Branch: 6.11-stage Base commit: 71f609e1b2bc844316538bb1f72b90132a5824b7
<b>IFWI</b>	<a href="#">\\basntgpiv01\CSS_CIV\saranya\ARL_SS02_B0B0-ODCA_CPSF_SEP0_04F40408_2024WW46.1.00.bin</a>
<b>PD FW</b>	<a href="#">ARL_S_2xBP_Retimer_Ports_TPS65994BF_F709_08_9E_0020_WW31_24.bin</a> <a href="#">TPSxFwUpdateApp_8bytes_reset_0131.efi</a>
<b>RETIMER FW</b>	<a href="#">HBR_MTL_S_6.24.2V2_Rel_SEC1_Prod_single_RT_DDR5_UDIMM_1DPC_TCP0_1_sign.cap</a> <a href="#">HBR_MTLARL_ALL_ALL_6.24.2V2_Rel_ALL_SEC1_PROD_MTL_DDR5_UDIMM_1DPC_TCP0_1_sign.bin</a> <a href="#">CapsuleApp.efi</a>

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## 3 RVP Validation Report

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### 3.1 Summary

Table 3-1: Overall Summary

Category	Total	Total Planned	Pass	Fail	Block	No Run	Pass%	Fail%	Block%	No Run%
Acceptance	93	93	93	0	0	0	100%	0%	0%	0%
Functional	1242	1242	1216	26	0	0	97.9%	2.09%	0%	0%
DPMO	4	4	4	0	0	0	100%	0%	0%	0%
DPMT	6	6	6	0	0	0	100%	0%	0%	0%

#### 3.1.1 Functional Test Summary

For detailed functional test report refer to [Link](#)

Table 3-2: Functional Test Summary

Component	Total	Pass	Failed	Blocked	No Run
audio	152	147	5	0	0
bios	8	8	0	0	0
bluetooth	60	60	0	0	0
bluetooth, wlan	2	2	0	0	0
coreboot	1	1	0	0	0
display	144	139	5	0	0
ethernet	25	25	0	0	0
ethernet, wlan	1	1	0	0	0
graphics	24	24	0	0	0
imaging	58	57	1	0	0
input_devices	7	7	0	0	0
io.storage	21	21	0	0	0
kernel	11	11	0	0	0
kvm	15	15	0	0	0
memory	4	4	0	0	0
OpenVINO	9	9	0	0	0
operating_system	29	29	0	0	0

Component	Total	Pass	Failed	Blocked	No Run
pci	3	3	0	0	0
performance	1	1	0	0	0
power_cycling	1	1	0	0	0
power delivery	4	4	0	0	0
power_mgmt	132	130	2	0	0
tbt3	122	115	7	0	0
TBT4	8	8	0	0	0
teams_app	22	20	2	0	0
thermal_mgmt	1	1	0	0	0
usb	144	143	1	0	0
video	151	148	3	0	0
NPU	14	14	0	0	0
wlan	68	68	0	0	0
<b>Grand Total</b>	<b>1242</b>	<b>1216</b>	<b>26</b>	<b>0</b>	<b>0</b>

### 3.1.2 UCIS Summary

For detailed UCIS Summary refer to [Link](#)

**Table 3-3: UCIS Summary**

Domain	Closed	Total
AI	1	1
Audio	20	20
Bluetooth	7	7
Camera	1	1
Debug	2	2
Display	14	14
Ethernet	3	3
Graphics	2	2
Media	1	1
Power	32	32
Security	1	1
Storage	3	3
System	9	9
TBT	6	6



Domain	Closed	Total
Type-C	2	2
USB	8	8
Video	13	13
Wi-Fi	11	11
<b>Total</b>	<b>136</b>	<b>136</b>

### 3.1.3 Stability

For Stability logs refer to [Link](#)

**Table 3-4: DPMO Summary**

Test	Iterations	# Machine	Result
S3	1500	10	Pass
S4	1500	10	Pass
Cold boot	1500	10	Pass
Warm boot	1500	10	Pass

**Table 3-5: DPMT Summary**

Test	Iterations	# Machine	Result
Video capture for 10 seconds	720 cycles	10	Pass
Photo Capture at Max Resolution	720 cycles	10	Pass
Webgl Aquarium	12 hours	10	Pass
YouTube Streaming over Wi-Fi	12 hours	10	Pass
Local Audio playback	12 hours	10	Pass
Local Video playback	12 hours	10	Pass

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## 4 Known Issues

For Bug report refer to [Link](#)

**Table 4-1: Known Issues**

Description	Component	Priority	Exposure	Status
[ARL-S][RVP][B0][PV]: A soft hang was observed when the TBT dock unplugged while in S3 / S4 state, with tbt devices connected in a daisy chain	TBT	p2-high	2-high	open
[ARL-S][RVP][PV][Canonical Checkbox]: memory/memory_stress_ng test getting crashed when initiated through checkbox.	Canonical	p2-high	2-high	open
[ARL-S Linux][RVP]: Spec n copy benchmark exits with failure sporadically	PnP	p2-high	2-high	open
[ARL-S][RVP][B0][PV]: Sporadically DUT takes long time to enter and exit from S4 with external monitor connected	Display	p2-high	2-high	open
[ARL-S][RVP][B0][PV]: TBT3 4K External monitor fails to display after waking from S4 state.	TBT	p2-high	2-high	open
[ARL-S][RVP][PV][Canonical Checkbox]:power-management/suspend-30-cycles-log/time-check-with-reboots is failing when initiated through checkbox.	Canonical	p3-medium	3-medium	open
[ARL-S][RVP][B0][PV]: Audio streaming is not automatically switching from onboard audio to external HDMI display	Audio	p3-medium	3-medium	open
[ARL-S][RVP][B0][PV]: Spordically Audio glitches observed on on-board speakers while playing Youtube videos/Localvideo playback/teams/hangoutcalls	Audio	p3-medium	3-medium	open
[ARL-S][RVP][A1][Alpha/Beta]: BT audio playback is not getting paused during Teams call.	Bluetooth	p3-medium	3-medium	open
[ARL-S Linux] AER not enabled for PCIe slot in ARL-S	Power Management	p3-medium	3-medium	open
[ARL-S][RVP][A2][Beta]:TBT SSD not enumerating behind DELL TBT3 Dock.	TBT	p3-medium	3-medium	open
[ARL-S][RVP][A1][Alpha]: CPU workload is not reflecting in monitor tab of the PTAT tool.	Thermal	p4-low	4-low	open

**Table 4-2: Stability Known Issues**

Description	Component	Priority	Exposure	Status
[ARL-S][RVP][B0][PV][DPMO] System throws write error while running S3 DPMO test.	Power Management	p2-high	2-high	open
[ARL-S][RVP][B0][PV][DPMO] System throws write error while running S4 DPMO test.	Power Management	p2-high	2-high	open

## Known Issues

Description	Component	Priority	Exposure	Status
[ARL-S][RVP][B0][PV][DPMO]: System hung with postcode 'b504' while running S4 DPMO test	Power Management	p3-medium	3-medium	open
[ARL-S][RVP][B0][PV][DPMO]: Unexpected system reset observed while running S4 DPMO test	Power Management	p3-medium	3-medium	open
[ARL-S][RVP][B0][PV][DPMO]: System hung with postcode 'b503' while running S3 DPMO test	Power Management	p3-medium	3-medium	open
[ARL-S][RVP][B0][PV][DPMO]: System was hung with postcode '0005' during Warm boot DPMO test	Power Management	p3-medium	3-medium	open
[ARL-S][RVP][B0][PV][DPMO]: System was hung with postcode 'B505' during Cold boot DPMO test.	Power Management	p3-medium	3-medium	open
[ARL-S][RVP][B0][PV][DPMO]: Unexpected system reset observed while running S3 DPMO test	Power Management	p3-medium	3-medium	open

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