

BMM COMPLIANCE TEST REPORT

Report Issue Date: 26th October, 2017

Issued To: Georgia Lottery Corporation

Issued By: BMM Testlabs
Travis Foley, Executive Vice President, Operations
815 Pilot Road, Suite G, Las Vegas, NV 89119
(702) 407 2420, www.bmm.com

Compliance Tested By: BMM Testlabs
815 Pilot Road, Suite G
Las Vegas, NV 89119

Manufacturer: Primero Games, LLC
2150 Northmont Pkwy, Suite H
Duluth, GA 30096

Compliance Review for:

Game:	Super Mix Nudge SAS	v1.37
Main:	Firmware ID	D3192BE2

Reference Numbers:

BMM: PRIM.1073

Report Number: PRIM10731GA_Lottery

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1. STANDARD TESTED TO/RESULT

Technical Standard used for Compliance Evaluation:	Test Result	
	Pass	Fail
Georgia COAM SAS Requirements v1.7, dated October 20, 2016	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2. SCOPE

Primero Games, LLC has requested BMM Testlabs to test the interoperability of Super Mix Nudge SAS v1.37 Firmware ID: D3192BE2 with the Intralot system. This report provides testing results of the ability for this software to accurately communicate and record transmitted data as required by the Intralot system.

The following SAS features were tested to evaluate the correct implementation of the SAS protocol for use with the Intralot system:

- Long Polls
- Meters
- Events

PROGRESSIVE FEATURE:

Supported

3. COMPLIANCE DETAILS

3.1 Gaming System Component File Details:

The following tables detail the relevant information for Super Mix Nudge SAS v1.37 Firmware ID: D3192BE2 that has been verified as compliant to the aforementioned Technical Standard:

Product ID	Product Version	Product Type	Filename	Signature	Signature Type
Super Mix Nudge	1.37	Game	G2-PG-SUPER-MIX-NUDGE-MG PGGA1-37 - D3192BE2.bin4sas	C8FDA3FE279A6F6ED7B5F18A918B9A2F0D7A0A93	SHA-1
Location: [CD/DVD/USB]					
Validation Program Used: BMM Signatures v2.0.1					

Note: Refer to Section 3.3 for verification tools used.

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Product ID	Product Version	Product Type	Filename	CRC16 With seed value "0000"	CRC16 With seed value "FFFF"
Super Mix Nudge	1.37	Game	G2-PG-SUPER-MIX-NUDGE-MG PGGA1-37 - D3192BE2.bin4sas	B056	4AB7
Validation Program Used: SAS Simulator v2.0.2.1					

Note: Refer to Section 3.3 for verification tools used.

3.2 Additional Program Notes:

- **Compatible Mother Boards:** RAPTORG2

Super Mix Nudge SAS v1.37 Firmware ID: D3192BE2 detailed in this report is anticipated to be compatible with the RAPTORG2 motherboard.

- Appendix 1 gives the details of the supported game and system Intralot functionality.

3.3 Software Signature Verification Information:

Signature Verification Application:

- (1) The SHA-1 signatures were calculated and verified using the BMM Signatures proprietary verification tool, which has been calibrated in accordance with ISO/IEC 17025 sections 5.5.2, 5.5.a, 5.5.c, and 5.5.8; as well as ISO/IEC 17020 sections 9.4, 9.6.b, 9.13.a, and 9.15.
- (2) Where requested, BMM will supply the regulator/operator with BMM's proprietary verification tool "BMM Signatures" for verifying the SHA-1 details above. A user manual will also be supplied.
- (3) Signature verification procedures may require administrator rights access.

Signature Verification Procedure:

Using BMM Signatures v2.0.1

1. Install BMM Signatures v2.0.1 on the computer to be used for software verification and double click on the "BMM Signatures" icon.
2. The BMM Signatures program will open.
3. Copy the file to be verified into the computer with BMM Signatures.
4. Select the "Files/Folders" tab.
5. Select the "Browse Files" button in BMM Signatures.
6. Navigate to the appropriate directory and select the files shown in Section 3.1 of this report.

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7. Select the “Open” button from the window.
8. Click the desired algorithm to use (e.g. SHA1). When the program is completed, the signatures will be displayed in the Output window.
9. Verify that the software file signatures obtained match those listed in Section 3.1 of this report.

Using SAS Long Poll command to verify CRC16 signature

1. Setup the game for SAS.
2. Send long poll command ‘\$21 = ROM signature verification’.
3. Enter two (2) bytes seed “0000” and “FFFF” one at a time.
4. Wait until CRC16 signature is generated.
5. Verify that the ROM signatures obtained match those listed in Section 3.1 of this report.

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4. TERMS AND CONDITIONS

BMM Testlabs (“BMM”) has conducted a level of testing of the gaming product which has historically been adequate for a submission of this type. However, inherent in testing in a laboratory environment are the unavoidable limitations of not being able to verify the effects of all possible configurations and environments that occur in actual gaming venues.

This compliance report is for use by the client for the jurisdiction (“Jurisdiction”) referenced in the report (the “Report”) and only verifies, as of the date stated, the gaming product described in the Report subject to any conditions or limitations set forth therein.

The manufacturer named in the Report is solely responsible for possession of the appropriate license to sell, lease, service, or provide gaming supplies or gaming-related services in the Jurisdiction and for compliance with the ongoing requirements of the Jurisdiction. It is the responsibility of the manufacturer and operators to ensure that the gaming product detailed in this Report is installed, maintained and operated correctly without defects and safely in accordance with requirements of the Jurisdiction.

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The undersigned certifies under penalty of perjury that the compliance testing of the gaming product detailed in this Report and any accompanying documents was conducted in accordance with the requirements of the Jurisdiction and that the gaming product meets the requirements of its laws and the regulations adopted thereunder, and all published technical standards, control standards, control procedures, policies, industry notices and similar requirements implemented or issued by the Jurisdiction to the best of BMM’s knowledge and belief.

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Please feel free to contact BMM if you have any questions with regard to this Report.

Yours sincerely,



Travis Foley
Executive Vice President, Operations
BMM Testlabs

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Appendix 1**Functions of Intralot Supported by the Software**

Georgia COAM SAS Requirement	Supported	Pass	Fail
COAM can be configured to remain enabled and playable when not connected to the CMS	✓	✓	
COAM sends exception 70 as required by the SAS protocol	✓	✓	
COAM allows cash out while disabled by the CMS	✓	✓	
Long Poll \$21 Response Time is under seven (7) minutes	✓	✓	
COAM can be configured with a machine address within the range of 1-127	✓	✓	
COAM can be configured with the base accounting denomination of \$0.01	✓	✓	
COAM Supported Long Polls			
0x01 Shutdown (lock out play)	✓	✓	
0x02 Start up (enable play)	✓	✓	
0x0E Disable real time event reporting	✓	✓	
0x0F Send meters \$10 through \$15	✓	✓	
0x19 Send meters \$11 through \$15	✓	✓	
0x1F Send Gaming Machine ID and Information	✓	✓	
0x21 ROM signature verification	✓	✓	
0x2F Send selected meters for game n	✓	✓	
0x51 Send total number of games implemented	✓	✓	
0x53 Send game n configuration	✓	✓	
0x54 Send SAS version ID and gaming machine serial number	✓	✓	
0x55 Send selected game number	✓	✓	
0x56 Send enabled game numbers	✓	✓	
0xA0 Send Enabled Features	✓	✓	
COAM Supported Meters			
0000 Total Coin In	✓	✓	
0001 Total Coin Out	✓	✓	
0002 Total Jackpot credits	✓	✓	
0003 Total hand paid cancelled credits	✓	✓	
0004 Total cancelled credits	✓	✓	
0005 Games Played	✓	✓	
0006 Games Won	✓	✓	

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Georgia COAM SAS Requirement	Supported	Pass	Fail
0007 Games Lost	✓	✓	
000B Total credits from bill accepted	✓	✓	
000C Current credits	✓	✓	
0016 Total ticket out	✓	✓	
001C Total machine paid pay table win, not including progressive or external bonus	✓	✓	
001D Total machine paid progressive win	✓	✓	
001E Total machine paid external bonus win	✓	✓	
001F Total attendant paid pay table win, not including progressive or external bonus	✓	✓	
0020 Total attendant paid progressive win	✓	✓	
0021 Total Attendant Paid External Bonus	✓	✓	
0022 Total won credits	✓	✓	
0023 Total Hand paid credits	✓	✓	
0024 Total drop	✓	✓	
0040-0057 Total number of X bills accepted	✓	✓	
COAM Supported Event Reporting			
Power Resets or power failure:			
17 AC power was applied to gaming machine	✓	✓	
18 AC power was lost from gaming machine	✓	✓	
Hand pay conditions (COAM jackpot, Cancelled credit handpay, Progressive Jackpot):			
51 Hand pay is pending	✓	✓	
52 Hand pay was reset	✓	✓	
Door Openings (any door that accesses a critical area of the COAM)			
15 Card cage was opened	✓	✓	
16 Card cage was closed	✓	✓	
98 Power off card cage access	✓	✓	
Operator Menu			
3C Operator changed options	✓	✓	
COAM Low RAM Battery:			
3B Low backup battery detected	*		
Buffer Overflow:			
70 Exception buffer overflow	✓	✓	
Meter Reset:			

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Georgia COAM SAS Requirement	Supported	Pass	Fail
7A Gaming machine soft meter reset	✓	✓	
Events – Applicable			
All SAS events supported based on hardware configuration of the COAM	✓	✓	

* Memory critical to the integrity of accounting is stored on a device that does not require a battery power source to retain its contents.