APOLLO G&N Specification
PS 2016042 Rev. B
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PROCUREMENT SPECIFICATION

PRODUCT CONFIGURATION AND ACCEPTANCE TEST REQUIREMENTS

FIXED MEMORY MODULE B1-B6 ASSEMBLY

Record of Revisions

Date	Revision Letter	TDRR No.	Pages Revised	Approvals	
				MIT	NASA
5/4/70	A	38029	1, 19, 10	DMB FL	DMB FL
6/24/70	B	38057	1, 10	DMB FL	DMB FL

This specification consists of pages 1 to 24 inclusive.

APPROVALS	9-4-69 NASA/MSC	CC Hall 8/1/69	1 Aug 69 MIT/IL	10/31/69 CCB	20 Feb 69 RAY

TABLE III

PIN NO.	to	PIN NO.	PIN NO.	to	PIN NO.
402		102	415		115
405		105	416		116
406		106	417		117
407		107	418		118
408		108	419		119
409		109	420		120
410		110	103		104
411		111	121		122
412		112	123		124
413		113	404		403
414		114	422		421
			424		423

3.1.5.3 The resistance between pins 401 and 101 shall be not less than 6 ohms, nor more than 25 ohms.

3.1.6 Input Voltage. The assembly shall function as specified herein when supplied with 14.0 ± 0.5 Vdc through a 3000 ohm ± 5% resistor to pin 201.

*3.1.7 Program Content. When the contents of the Fixed Memory Module are compared to the tester tape programmed in accordance with ND 1002378, each core shall contain the correct information.

3.1.8 Clear Mode. With the input and timing waveforms as specified in paragraph 4.2.8, the output waveform at the manufacturer's test sense line (pins 101 and 401) shall be as shown in Figure 3 and defined as follows:

Zero noise (V_0 max), measured between 1.1 ± 0.05 μsec and 2.3 ± 0.05 μsec after the start of Logic Reset (FCR), shall be NMT 25 mv.

*NOTE: For tester tapes not prepared per ND 1002378 check sum & parity checks may be made in an AGC computer.

3.1.12 Vacuum. The module shall be capable of operating as part of an AGC in an atmosphere of NMT 1 mm/Hg with coldplate coolant temperature at 35 ± 5°F. It shall produce the proper Self-Check and Parity Checks as applicable to that particular program assembly of which the module is a part.

3.2 PRODUCT CONFIGURATION

3.2.1 Drawings. The configuration of the assembly shall be in accordance with APOLLO G&N Dwgs. 2003972/2010802 and all drawings and engineering data referenced thereon.

3.2.2 Weight. Weight of the module shall be recorded.

4. QUALITY ASSURANCE PROVISIONS

4.1 GENERAL. The responsible contractor of the assembly shall be responsible for the accomplishment of each test required herein. See Table IV, Product Performance and Configuration Requirement/Quality Verification Cross Reference Index.

TABLE IV

Requirements	Verification	Applicable JDC
3.1.1	4.2.2	04255
3.1.2	4.2.3	04255
3.1.3	4.2.4	04255
3.1.4	4.2.5	04255
3.1.5.1	4.2.6.1	04255
3.1.5.2	4.2.6.2	04255
3.1.5.3	4.2.6.3	04255
3.1.7	4.2.7	04255
3.1.8	4.2.8	04255
3.1.9.1	4.2.9.1	04255
3.1.9.2	4.2.9.2	04255
3.1.9.3	4.2.9.3	04255
3.1.9.4	4.2.9.4	04255
3.1.10.1	4.3.1.1	04255
3.1.10.2	4.3.1.2	04255
3.1.10.3	4.3.1.3	04256
3.1.11	4.3.2	04255
3.1.12	4.3.3	04257 or 04258
3.2.1	4.2.1	04255
3.2.2	4.2.10	04255

4.3.2 Vibration. Subject the module to the vibration limits specified in paragraph 3.1.11, and verify that the module meets the continuity requirements of paragraph 3.1.11.

4.3.3 Vacuum. With the ambient atmospheric pressure vaired as specified in paragraph 3.1.12, test the module per JDC 04257 and verify its successful performance, using a qualified computer and Dsky's.

4.3.4 Qualified Computer. A computer shall be deemed qualified by successfully passing the following tests.

JDC	05343	Equipment Set-Up
	05344	Equipment Power Turn-On
	05345	Computer Power Turn-On
	05391	E-Memory Capacitor Selection
	05342	Adder Voltage Frequency Test
	05374	Marginal Frequency, Voltage, Thermal Test
	05394	Transient Voltage Test
	05351	Marginal Voltage Test
	05376	Automatic Newspeak Test
	05379	DSKY Test (Indicator & Keyboard)
	05382	Standby E-Memory Test
	05385	DSKY Spacecraft Signals
	05384	Priority of Interrupts
	05388	CTS Control of Newspeak

4.3.5 Qualified Dsky's. A DSKY shall be deemed qualified by successfully passing the following tests:

JDC	05343	Equipment Set-Up
	05344	Equipment Power Turn-On
	05345	Computer Power Turn-On
	05391	E Memory Capacitor Selection
	05342	Adder Voltage Frequency Test
	05374	Marginal Frequency, Voltage, Thermal Test
	05394	Transient Voltage Test
	05351	Marginal Voltage Test
	05376	Automatic Newspeak Test
	05379	DSKY Test (Indicator & Keyboard)
	05382	Standby E-Memory Test
	05385	DSKY Spacecraft Signals
	05384	Priority of Interrupts
	05388	CTS Control of Newspeak