AGB Software Submission Requirements

Section 1. The Software Submission Process

All software submissions to Nintendo of America Inc. must be forwarded to the attention of NOA Product Testing Supervisor. Otherwise, the submission's placement into the testing queue may be delayed. To help reduce a submission's turn-around time, it is suggested that licensees assign a primary contact person for each software submission. All communications with NOA concerning a submission's testing status should be forwarded through this individual. The contact person should also be responsible for notifying any other interested parties.

When a submission is approved, your company's <u>primary</u> contact will be notified by NOA Licensing Department in writing.

When a submission is not approved, NOA may send a file in MPEG format illustrating the programming problem(s) which prevent(s) the submission from being approved. This is intended to assist the licensee in analyzing the cause of the software problem. It is the licensee's responsibility to send a copy of this file to any developer(s) of the software. NOA strongly encourages that copies be sent to the software developer(s) as quickly as possible.

Software submissions should be sent to the following address:

> Nintendo of America Inc.
> Attn: Engineering, Product Testing Supervisor
> 4820 150th Avenue NE
> Redmond, WA 98052
> Phone: (425) 861-2819
> Fax: (425) 861-2845

Section 2. Items Required for Submissions

The following items must be submitted with each Game Boy Advance software submission.

2.1 ROM Data

When submitting ROM data, prepare **1 set** of CD-R disks, or FTP the file directly to NOA Product Testing (Lotcheck) group.
(Note) With a CD-R disk, make sure it is a format that can be read with Windows95/98.
(Note) For details see, Section 4. Saving Data to a Disk (page 9) .
(Note) To gain access to NOA Lotcheck's FTP, please E-mail Lotcheck@noa.nintendo.com.
(Note) A note regarding software that supports AGB communication. <u>If the link communication is only accessible after completing one hour or more of gameplay, provide a back-up data file with your submission to allow quick access to this option</u>.

2.2 AGB Game Pak Specification Sheet

The most recent version is Form 2000-01.

Refer to the following pages when completing this form.

2.3 Instruction Manual

If an official version of the User's Manual is not completed, please provide a simplified version which contains Controller Functions and Save procedures for the game.

2.4 Software Destination Declaration

Please fill out the Software Destination Declaration/Checklist (SDD) completely and accurately. This form is available at http://www.noa-engineering.com. The document is necessary to ensure the software is distributed to the proper department/person.

2.5 ESRB Rating Certificate

Nintendo must receive a copy of the ESRB rating cerficiate prior to testing any Lot Check submissions. If you have not yet received the certificate from the ESRB, please send us a copy of the video tape you submitted to the ESRB. In this event, please send the certificate upon receipt from the ESRB.

Note: Nintendo will only approve products which are rated by the ESRB and do not receive an Adult Only (AO) rating.

Note: If you have not yet received the certificate from the ESRB, please send us a copy of the video tape you submitted to the ESRB. In this event, please send the certificate upon receipt from the ESRB.

Section 3. Completing the AGB Software Specification Sheet

Please complete the following items on the AGB Software Specification Sheet.

For your convenience, this sheet is included at the end of this document in an "Online" format, which includes standard Word "Help" functions. If you choose this format, please complete your entries online, print the form, and send it along with your game submission. Please don't forget to print out the SDD/Checklist, fill in your entries, and include it as well.

As an alternative, this document and forms are also included in PDF format. If you choose this format, please print out the forms and fill them out by hand.

3.1 Game Title

Print the name of your game.

3.2 Game Code

Print the Game Code provided to you by Nintendo of America Inc.

 (Note) If you have not received a Game Code, you may request this by E-mailing Lotcheck@noa.nintendo.com. Please include the following information:

> Game Title
> Publisher
> "AGB"
> ROM Size
> Back-up Memory Type/Size
> Accessories used (if any)
> Any markets where game is planned to be released (Game Code if previously assigned)

3.3 Language

Indicate the primary language used for messages in the game.

3.4 Support for AGB Game Link Cable

(If the communication cable is supported, please attach a document which includes the game specifications and a detailed explanation of the communication functions used.)

Following the example below, check if Multi-Game Pak mode is supported(*1), if Single Game Pak mode is supported(*2), number of players supported, etc.

Example:

This is a car racing game. If two people have the same game two people can play, if three people have the same game three can play, and if four have the same game four can play. If only one person has a Game Pak, up to three people can play a special course(one level) which is not in the normal modes. Additionally, in this Single Game Pak Mode if the software is inserted in the slave, you can load your custom made car and race on this special course against others' customized cars. (If no software is inserted in the slave, you can only select the default car)."

Using the above example the form would be completed as follows:

	Multi Game[*1] Pak Support	☐ N ☒ Y	☒ 2 ☒ 3 ☒ 4 Player Support ☒ Same Game ☐ Other Game (Title:_____)		
Supports AGB Game Link Cable	Single Game[*2] Pak Support	☐ N ☒ Y	☒ 2 ☒ 3 ☐ 4 Player Support		
			Number of Game Paks Supported	☒1 ☒2 ☒3 ☐4	
			☒ Same Game ☐ Other Game (Title:_____)		
			Difference in game with number of Game Paks(*3)	☐ N	☒ Y
	If you answered "Y" to both *1 and *2 above, is there a difference in specifications for Multi Game Pak Mode and Single Game Pak Mode?			☐ N	☒ Y

- Multi-Game Pak Support: This game supports Multi Game Paks so check "Y".
  Players Supported: From 2 to 4 players can play so check 2, 3, and 4.
  Supported Games: Only communication between the same game is supported so check
      "Same Game".
      (If the game can be connected with another game title, please check
      "Other Game" and specify the game title.)

- Single Game Pak Support: This game supports 1 Game Pak so check "Y".
  Players Supported: From 2 to 3 players can play so check 2 and 3.
  Number of Game Paks Can Use: Possible to load saved data from a maximum of 3 peoples'
      Game Paks, so check 1, 2, and 3.

  Supported Games: Only communication between the same game title is supported so check
      "Same Game".
      (If the game can be connected with another game title, please check "Other
      Game" and specify the game title.)

-Difference in specifications with different number of Game Paks:
 In this game, the difference is that if you have a Game Pak you can load saved data so check
"Y".

-Difference between Multi-Game Pak and Single Game Pak:
In this game, there is a difference in the courses and number of players supported for both game modes so check "Y".

<*1> Multi-Game Pak Support: Specifications call for a Game Pak to be inserted for all AGBs connected by the communication cable.

<*2> Single Game Pak Support: Specifications allow for game play with a fewer number of Game Paks than there are AGBs attached with the AGB Link cable. (A game supporting Single Game Pak Mode has specifications which call for the game program being downloaded from the master Game Pak and executed, even if multiple Game Paks are supported.)

3.5 Support for Infrared Communication

Indicate if AGB infrared communication is supported.

If it is supported([Y]), designate the name of the game with which communication can be performed (if it is not the same game).

(Note) If the IR Communication is only accessible after completing one hour or more of gameplay, provide a back-up data file with your submission to allow quick access to this option.

3.6 Support of Other Peripheral Devices

If other peripheral devices are supported, indicate this.

3.7 Overseas Version

If this game has been released overseas or if it is planned to be released overseas, indicate the Game Title and Game Code. Insert the intended Market Code (USA/JPN) in the parenthesis.

3.8 Contact

Provide the contact information of the representative from your company that Nintendo of America Inc. should contact with questions or comments about a game. Please include all information including phone number and E-mail address.

3.9 Submission Date/Method

Indicate the submission date and method of submission (FTP or CD-R via Shipping).

3.10 Launch Date

Provide the scheduled release date for the game if available.

3.11 Memory Configuration

Indicate the memory configuration of the game.

- ROM

  Indicate the ROM size.

- Backup Memory

  Indicate if there is backup memory in the Game Pak.

  If there is backup memory ([Y]), indicate the size and type.

  If SRAM is used, indicate if there is a battery.

- Support Levels for Program to Avoid Loss of Backup Data

  When a hot plug-in is performed (Game Pak inserted during game play with power ON), the AGB-CPU will lock up and backup data may be lost. A program should be created in order to prevent the backup data from being lost.

  If a Battery is required, please indicate which level (1-4) of data protection method was used. For more information, refer to the AGB Programming Caution, "Cautions when Using SRAM".

- Backup Library Version

  Indicate the version number written at the start of the header file for the Backup library being used (ie. Ver. 1.0.0).

  There are two header files for SRAM. SRAM.h is for Normal Speed and SRAMFAST.h is for Fast access. Please specify which library is used.

3.12 ROM Version

- Mask ROM Version

Indicate "0" if submitting the first version of the game (ie. the game has never been produced).

Indicate the next higher number for each revised version after starting production

(1, 2, 3….).

- Submission ROM

Indicate "0" for the first submission. Indicate the next higher number each time the game is submitted to NOA Lotcheck, without updating the Mask ROM version.

Example

Version	First	Second	Third		Fourth	Fifth
Mask ROM Version	0	0	0	Change after first production →	1	1
EEPROM Version	0	1	2		0	1
Version on Title Label of EEPROM	0.0	0.1	0.2		1.0	1.1

First Production

		Sixth	Seventh
	Change after second production →	2	2
		0	1
		2.0	2.1

Second Production

3.13 Game Title

Indicate the Game Title registered in each designated address in the Master ROM, along with the Game Code.

Refer to Section 5. Character Code List for Game Title Registration (page 10) and Section 6. ROM Registration Data Specifications (page 11), for information on codes that can be used with Game Titles.

(Note) Use 20h for spaces within the Game Title. 00h may be used to fill unused portions following the Game Title.

3.14 ROM Registration Data

Indicate content registered in each designated address of the Master ROM.

For detailed information on ROM registration data, refer to Section 6. ROM Registration Data Specifications (page 11),

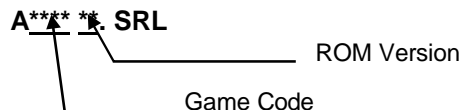In the parenthesis in the data column, enter ASCII characters (alphanumeric).

3.15 File Name and CRC

- File Name

Check either CD-R or FTP, and indicate the file name.

Use the following format for file names.

(Note) For more details, refer to Section 4. Saving Data to a Disk (page 9).

A**** **. SRL

ROM Version

Game Code

- CRC

Calculate CRC using the AGB CRC Check Utility software provided by Nintendo of America Inc.

(Note) Download the AGB CRC Check Utility software from our web site, http://www.noa-engineering.com.

## *3.16 Programming Features*

Special Programmiing

For copy protection indicate if special programming has been done.

If special programming for copy protection is in use, include an explanation of its content in the "Remarks".

Section 4. Saving Data to a Disk

1. For media, use a CD-R (or FTP).

2. For the data format, use binary/uncompressed. Ensure Master ROM size equals the Mask ROM size ordered.

3. Write the file name in the following format.

A**** **. **SRL**

ROM Version(2 digits)

Game Code(4 digits)
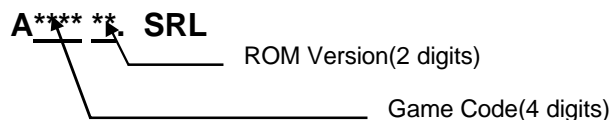
[Example] - Game Code = "AMAE"

- ROM Version="0.2"

File Name ="AAMAE02. SRL"

4. Indicate the following information on the CD-R.

Company name/Game Title/Game Code/File Name/CRC/Date

(Note) To prevent labels from coming off in the CD drive with CD-R, use CD labels, or write directly on the CD-R.

Also, when sending please insert in a CD jewel case.

[Example of a Label for CD]

```
Company Name: Nintendo of America Inc.
Game Title: Mario Advance
Game Code:   AGB – P – AMAE (USA)
File Name:     AAMAE00. SRL
CRC:           ABCDH
Date:        12/25/2001
```

Section 5. Character Code List for Game Title Registration

	00	10	20	30	40	50	60	70	80	~	F0
0			SP	0	@	P					
1			!	1	A	Q					
2			"	2	B	R					
3			#	3	C	S					
4			$	4	D	T					
5			%	5	E	U					
6			&	6	F	V					
7			'	7	G	W					
8			(	8	H	X					
9			)	9	I	Y					
A			*	:	J	Z					
B			+	;	K	[					
C			,	<	L	¥					
D			-	=	M	]					
E			.	>	N	^					
F			/	?	O	_					

Note 1: Do not use characters in shaded areas for Game Boy Advance titles.
Note 2: Use 20H (SP) for spaces within the Game Title.
Note 3: Use 00H for unused areas after the Game Title.

Example: If ASCII character is "A", ASCII code is "41".

Section 6. ROM Registration Data Specifications

For the Game Boy Advance program, set information for Game Title, Game Pak specifications, etc. in designated addresses in the ROM.

The registration data addresses are 32 bytes located in the CPU memory from **80000A0H-80000BFH.**

Record the ROM registration data in the format described below.

[Caution]

> The data in the following addresses need to remain fixed, regardless of the Game Title or Game Code.
>
> Address 80000B2H 96H
> Address 80000B5H-80000BBH 00H
> Address 80000BEH-80000BFH 00H

6.1 Game Title (80000AOH-80000ABH)

Store the Game Title with ASCII Code 20H-5FH and 00H.

Do not use katakana or lower case letters.

Use 20H for blank spaces within the Game Title, and 00H for unused portions after the Game Title.

For information on characters that can be used refer to Section 5. Character Code List for Game Title Registration (page 10).

The Game Title saved here is not the development name. Use a name that clearly identifies the actual product name.

[Example]

	Game Title	M		A		R		I		O	
80000A0H ≀ 80000ABH	Code/Hex	4	D	4	1	5	2	4	9	4	F	2	0
	Game Title	C		A		R		T			
	Code/Hex	4	3	4	1	5	2	5	4	0	0	0	0

6.2 Game Code (80000ACH-80000AFH)

Register the four digit Game Code, established for the game, in ASCII code (English characters should be capitalized).

[Example]

If the Game Code is "AMAE":

Data Name	Address	Data*
Game Code	80000ACH	41 H('A')
	80000ADH	4D H('M')
	80000AEH	41 H('A')
	80000AFH	45 H('E')

6.3 Maker Code (80000BOH, 80000B1H)

Save this in ASCII code (English characters must be capitalized) using the 2 digit code assigned by Nintendo of America Inc. when contracts were completed.

[Example]

If the Maker Code is "01":

Data Name	Address	Data*
Maker Code	80000B0H	30 H('0')
	80000B1H	31 H('1')

6.4 Main Unit Code (80000B3H)

Save the code of the main unit to be used with this product's game program.

Address 80000B3H	Main Unit
00H	Game Boy Advance

(Note) Currently, no data other than 00H is used.

6.5 Device Type (80000B4H)

Save the code for the device type used with the Game Pak.

Address 80000B4H	Device Type
00H	Normal

(Note) Currently, no data other than 00H is used.

6.6 Mask ROM Version Number (80000BCH)

Save the Mask ROM version number for the produced product.

Update if the Mask ROM program has been revised.

[Example]

If submission ROM version is 0.0, 0.1, 0.2… → Data "00H"

"   "   "   1.0, 1.1, 1.2… → Data "01H"

6.7 Complement Check (80000BDH)

Add 19H to the sum of all the data in Addresses 80000A0H-80000BCH, and save 2's complement.

(80000A0H)+(80000A1H)+(80000A2H)+…+(80000BCH)+19H+(80000BDH)=00H

                                                                                                    Complement

6.8 Reserved Area

The data stored in the Reserved Area is unrelated to the game. Store the fixed values listed below.

Address 80000B2H = 96H
Address 80000B5H ~ 80000BBH = 00H
Address 80000BEH ~ 80000BFH = 00H

AGB Software Specification Sheet Version 2000-01 (2/23/01)

Game Title	
Game Code	AGB-P- (USA)
Language	☐ English ☐ Japanese ☐ Other ( )

PERIPHERAL DEVICES

Supports AGB Game Link Cable	Multi Game Pak Support *1	☐ N ☐ Y	☐ 2 ☐ 3 ☐ 4 Player Support	
			☐ Same Game ☐ Other Game (Title:)	
	Single Game Pak Support *2	☐ N ☐ Y	☐ 2 ☐ 3 ☐ 4 Player Support	
			Number of Game Paks Supported	☐ 1 ☐ 2 ☐ 3 ☐ 4
			☐ Same Game ☐ Other Game (Title:)	
			Difference in game with number of Game Paks	☐N ☐Y
	If you answered "Y" to both *1 and *2 above, is there a difference in specifications for Multi Game Pak Mode and Single Game Pak Mode?		☐N ☐Y	
Supports Infrared Communication	☐ N ☐ Y	☐ Same Game ☐ Other Game (Title:)		
Supports Other Peripheral Devices	☐ N ☐ Y	Device Name (Title:)		

Overseas Version (Or planned version)	☐ N ☐ Y	Game Title: Game Code: AGB-P- _____ ( )

CONTACT

Company/Dept.	
Name	E-mail:
Address	Line 1: _____ Line 2: _____ Tel: Fax:

Submission Date	/ / **MM/DD/YYYY**	Method of Submission	☐ Mail ☐ FTP
Launch Date	/ / **MM/DD/YYYY**		

(*1) Multi Game Pak Support: Specifications call for a Game Pak inserted in each AGB connected.
(*2) Single Game Pak Support: Specifications allow for game play with a fewer number of Game Paks than there are AGBs connected.

Memory Configuration

ROM	Size: _____Bits			
Backup Memory Specifications	☐ N ☐ Y	____ Bits	☐ EEPROM	
			☐ SRAM	Backup Battery ☐Required ☐Not Required
			Program to avoid loss of SRAM: Level:___	
			☐ Flash Memory	
		Backup Library	Version ___. _____. ☐ Normal ☐ Fast (Only if SRAM is checked)	

ROM Version

Mask ROM	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ __ ☐ E
Submission ROM	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ __

ROM Registration Data

80000A0H to 80000ABH	Game Title							
	Code/Hex							
	Game Title							
	Code/Hex							

* For software title registration, use the Character Code List for Game Title Registration on page 10. The code for a space is 20H. The code for unused areas is 00H.

Data Name	Address	Data*	Data Name	Address	Data*
Game Code	80000ACH	____H (' ')	Device Type	80000B4H	____H
	80000ADH	____H (' ')	Reserved Area	80000B5H to 80000BBH	00H
	80000AEH	____H (' ')			
	80000AFH	____H (' ')	Mask ROM Version	80000BCH	____H
Maker Code	80000B0H	____H (' ')	Complement Check	80000BDH	____H
	80000B1H	____H (' ')			
Fixed Value*	80000B2H	96H	Reserved Area	80000BEH to 80000BFH	00H
Main Unit Code	80000B3	____H			

* Insert ASCII characters in parenthesis (' '). Always use 96H for 80000B2H.

File Name and CRC

Disk	☐ CD-R
File Name	A _____.SRL
CRC	_____ H

Programming Features

Special Programming for Copy Protection	☐N	☐Y (Attach Explanation)

Remarks

	Nintendo/Received

D.C.N. AGB-06-0020-001A

Nintendo®

Software Destination Declaration/Checklist

Fax to: NOA Lot Check (425)-861-2845

Please fill out completely

Date: _____

A version of _____ has been sent to Nintendo of America Inc. The software was
                          Software title

developed by _____ for _____ .
                     Developer   Publisher

This software is to be forwarded to the appropriate person(s) in the department(s) marked below. This software should not be distributed to any other person(s), or used for any other purposes than those expressly marked below.

Purpose of Submission:

Method of submission: ___ CD-ROM/Floppy Disk   or   ___ FTP to _____ folder
                                                                              Co. Name

Departments which should have access to this submission:

Departments:
____ Mario Club   ____ Nintendo Power   ____ Product Acquisition

____ Lot Check   ____ NOA Licensing

Individuals:
_____
_____
_____

PROGRAM INFORMATION:

____ Game Boy   ____ DMG/CGB-Dual   ____ CGB Only   ____ AGB   ____ N64   ____ NUSG

PROGRAM SIZE (in Mbits):

EEPROM, SRAM, FLASH RAM   YES   NO   SIZE: _____

RUMBLE PAK: YES   NO

CONTROLLER PAK: YES   NO

# of Notes_____ # of Pages_____ Note Name(s): _____

EXPANSION PAK (RAM):   YES   NO

Other features (IR communication, password, etc.): _____

Include the following information/materials with each version:

_____ Software Specification Sheet (for Lot Check) or _____ Checksum value (for others)

_____ ROM Image File (submit via FTP, or mail on CD-ROM/3.5" floppy disk). All disks will be destroyed after receipt of game into our system.

_____ Copy of ESRB Rating Certificate or VHS Tape sent to ESRB (1st submission to Lot Check only).

_____ Print out of screen text (first submission to Lot Check only).

_____ Copy of Instruction Manual or Game Play Instructions, include description of how and where special features are utilized. (first submission to Lot Check only).

_____   _____   _____
Sender or Contact Person   Phone   Fax or E-mail