

System Block Serial Command Specifications

Target Device R9A06G037

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1. Handling of Unused Pins

Handle unused pins in accordance with the directions given under Handling of Unused Pins in the manual.

The input pins of CMOS products are generally in the high-impedance state. In operation with an unused pin in the open-circuit state, extra electromagnetic noise is induced in the vicinity of LSI, an associated shoot-through current flows internally, and malfunctions occur due to the false recognition of the pin state as an input signal become possible. Unused pins should be handled as described under Handling of Unused Pins in the manual.

2. Processing at Power-on

The state of the product is undefined at the moment when power is supplied.

- The states of internal circuits in the LSI are indeterminate and the states of register settings and pins are undefined at the moment when power is supplied.
 - In a finished product where the reset signal is applied to the external reset pin, the states of pins are not guaranteed from the moment when power is supplied until the reset process is completed.

In a similar way, the states of pins in a product that is reset by an on-chip power-on reset function are not guaranteed from the moment when power is supplied until the power reaches the level at which resetting has been specified.

3. Prohibition of Access to Reserved Addresses

Access to reserved addresses is prohibited.

 The reserved addresses are provided for the possible future expansion of functions. Do not access these addresses; the correct operation of LSI is not guaranteed if they are accessed.

4. Clock Signals

After applying a reset, only release the reset line after the operating clock signal has become stable. When switching the clock signal during program execution, wait until the target clock signal has stabilized.

When the clock signal is generated with an external resonator (or from an external oscillator) during a reset, ensure that the reset line is only released after full stabilization of the clock signal. Moreover, when switching to a clock signal produced with an external resonator (or by an external oscillator) while program execution is in progress, wait until the target clock signal is stable.

5. Differences between Products

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The characteristics of Microprocessing unit or Microcontroller unit products in the same group but having a different part number may differ in terms of the internal memory capacity, layout pattern, and other factors, which can affect the ranges of electrical characteristics, such as characteristic values, operating margins, immunity to noise, and amount of radiated noise. When changing to a product with a different part number, implement a system-evaluation test for the given product.

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System Block

Serial Command Specifications

R11UM0043EJ0107 Rev.1.07 Jun. 27, 2019

1. Introduction

This document describes about specifications of Serial Command for System Block in R9A06G037 firmware.

1.1 Software Configuration

R9A06G037 firmware is configured by System Block, UART-IF Block and another Block (G3 Block or PRIME Block or others). This document describes the specification of serial command to control System Block.

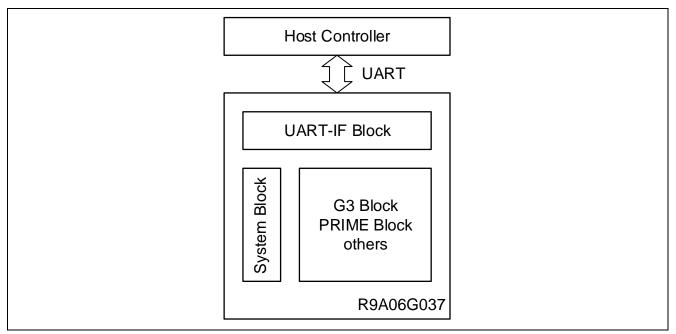


Figure 1-1 Software configuration of R9A06G037 firmware

1.2 References

No.	References	Revision
1	Serial Boot Operating Manual	-

2. Basic Serial Command Specification

2.1 Setting of UART Communication

Table 2-1 shows a setting of UART communication with Host controller.

Baud rate is set in boot sequence of R9A06G037. (Refer to References No.1.)

Table 2-1 the setting of UART communication

Name	Description
Communication mode	Full duplex asynchronous communication
Baud rate	507,352.94bps (recommendation)
Data bit	8bit
Parity type	None
Stop bit	1bit
Flow control	None

2.2 Serial Command Packet Format

The stream of data is encapsulated in HDLC-type frames which included a 2byte header and a 4byte CRC. All data is encapsulated between a starting flag byte "0x7E" and ending flag byte "0x7E". Figure 2-1 and Table 2-2 show serial command packet format.

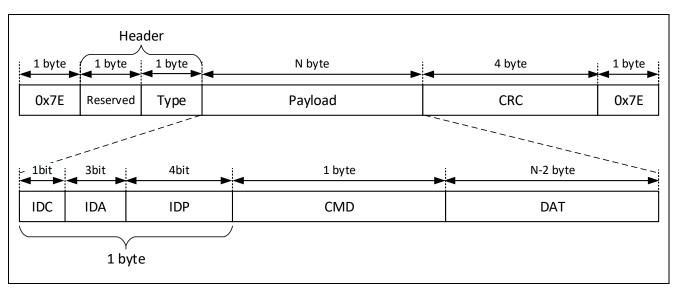


Figure 2-1 Serial Command Packet Format

Table 2-2 Serial Command Packet Format Table

	Flag	Head	der			Paylo	CRC	Flag		
	byte	Reserved	Type	IDC	IDA	IDP	CMD	DAT	CKC	byte
Value	0x7E	0x00	0x00	0x0	0xX	0x0	0xXX	0xXX 0xXX	0xXX 0xXX	0x7E
Length	1byte	1byte	1byte	1bit	3bit	4bit	1byte	N-2 byte	4byte	1byte
Remarks	ı	-	System Block	Fix ed	ı	Fix ed	ı	-	Big endian	-

If any of the intermediate data characters has the value "0x7E", it is preceded by an escape byte "0x7D" followed by a byte derived from XORing the original character with byte "0x20". The same is done if there is a "0x7D" within the character stream. An example of such case is shown below.

Message to Tx	0x01	0x02	0x7E		0x03	0x04	0x7D		0x05
Actual Tx sequence	0x01	0x02	0x7D	0x5E	0x03	0x04	0x7D	0x5D	0x05
			Escape	sequence)		Escape	sequence	!

2.2.1 Flag byte

Flag byte is the packet synchronization delimiter to identify the start and end point of packet. This field is always "0x7E".

2.2.2 Type

Type field identifies the target Block of R9A06G037 firmware.

This document describes about the case that Type field is 0x00(System Block).

Table 2-3 Type Definition

Туре	Description
0x00	System Block
0x01	G3 Block
0x02	PRIME Block
others	Reserved

2.2.3 CRC

The 32 bit CRC at end of the frame covers both Header field and Payload field. The CRC is calculated over the original data to be transmitted (that is the data before byte stuffing of escape sequences).

Table 2-4 CRC parameters

Item	Description
Name	CRC-32
Polynomial	0x4C11DB7
Shift Direction	Left
Initial Value	0
Output XOR	0x00000000
Finalization	Not bit inversion

In the case that CRC error is detected in the received serial command, System Block notifies it to Host Controller by SYSTEM-EVENT.indication.

2.2.4 IDC

IDC field is reserved and fixed "0x0" when Type field is 0x00(System Block).

2.2.5 IDA

IDA field identifies the access type. The details of access type are described in section 2.3.

Table 2-5 IDA Definition of System Block command

IDA	Description
0x0	Request
0x1	Confirm

0x2	Indication
others	Reserved

2.2.6 IDP

IDP field is reserved and fixed "0x0" when Type field is 0x00(System Block).

2.2.7 CMD

CMD field identifies serial command ID. The details of command ID are described in section 2.4.

2.2.8 DAT

DAT field is the data corresponded to IDA and CMD field. Each element of this field is big endian.

The details are described in chapter 3.

2.3 Access Type

Serial Command is categorized into 3 types, "Request", "Confirm" and "Indication" in System Block.

Table 2-6 Access Type Definition

Access Type	Description
Request	The request from Host Controller to R9A06G037.
Confirm	The response to "Request" type Serial Command.
Indication	The notification from R9A06G037.

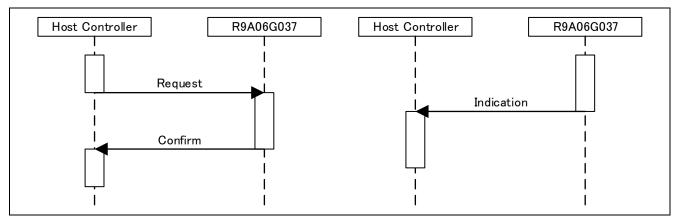


Figure 2-2 Access Type

2.4 Serial Command List

Table 2-7 shows a command list of System Block.

The details of these commands are described in chapter 3.

Table 2-7 Command List

Command Name	Command	Access type (V: Enabled, -: Disabled)			Description
	ID.	Request	Confirm	Indication	
SYSTEM-PING	0x00	V	V	-	Request of confirming operation condition of R9A06G037.
SYSTEM-VERSION	0x01	V	V	-	Request of getting version information of R9A06G037 and System Block.
SYSTEM-RESET	0x02	V	-	-	Request of reset to R9A06G037 hardware.
SYSTEM-BOOTUP	0x03	-	1	V	Notification of completion of R9A06G037 boot.
SYSTEM-EVENT	0x04	-	-	V	Notification of R9A06G037 event.
SYSTEM-REBOOT- REQUEST	0x05	-	1	V	Notification of fatal state in R9A06G037.
SYSTEM-CLEARINFO	0x10	V	V	-	Request of clearing the statistics and the logs for System Block (including UART-IF Block).
SYSTEM-GETINFO	0x11	V	V	-	Request of getting the statistics and the logs for System Block (including UART-IF Block).
SYSTEM-SROM- READ	0x20	V	V	-	Request of reading the Serial Flash connected with R9A06G037.
SYSTEM-SROM- WRITE	0x21	V	V	-	Request of writing the Serial Flash connected with R9A06G037.
SYSTEM-SROM- ERASE	0x22	V	V	-	Request of erasing the Serial Flash connected with R9A06G037.

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2.5 Statistics and Log

UART-IF Block records some information. This information is categorized into statistics and log.

User can get this information by SYSTEM-GETINFO command and clear by SYSTEM-CLEARINFO command.

The details of statistics and log are shown below.

2.5.1 Statistics

Statistics are configured by some parameters.

Table 2-8 Statistics parameter of UART-IF Block

Parameter	index	Description
R_UIF_STATS_RX_IN_CRC_ERROR	0x00	The number of detecting CRC error on received HDLC-type packet.
R_UIF_STATS_RX_IN_SYNC_BREAK	0x01	The number of receiving invalid length HDLC-type packet.
R_UIF_STATS_RX_IN_TIMEOUT	0x02	The number of timeout during receiving HDLC-type packet.
R_UIF_STATS_RX_IN_LENGTH_ERROR	0x03	The number of receiving length over HDLC-type packet.
R_UIF_STATS_RX_IN_BUFF_OVERFLOW	0x04	The number of detecting the receiving buffer overflow.
R_UIF_STATS_RX_IN_SECURITY_SUCCESS	0x05	Reserved.
R_UIF_STATS_RX_IN_SECURITY_ERROR	0x06	Reserved.
R_UIF_STATS_RX_IN_DISCARD	0x07	The number of discarding packet during asynchronous.
R_UIF_STATS_RX_OUT_COMMAND_REQD	0x08	The number of times that transmitting receiving HDLC-type packet is successful after parsing the command.
R_UIF_STATS_RX_OUT_COMMAND_REQD_ERROR	0x09	The number of times that transmitting receiving HDLC-type packet is failed.
R_UIF_STATS_RX_OUT_COMMAND_SUCCESS	0x0A	The number of times that command buffer is released by destination.
R_UIF_STATS_TX_IN_RCV_COMMAND	0x0B	The number of times that encapsulating HDLC-type packet is successful.
R_UIF_STATS_TX_IN_RCV_ERROR	0x0C	The number of times that requesting command packet for Tx is failed.
R_UIF_STATS_TX_IN_SECURITY_SUCCESS	0x0D	Reserved.
R_UIF_STATS_TX_IN_SECURITY_ERROR	0x0E	Reserved.
R_UIF_STATS_TX_OUT_COMMAND_REQD	0x0F	The number of times that transmitting requested command is successful after encapsulating HDLC-type packet.
R_UIF_STATS_TX_OUT_COMMAND_SUCCESS	0x10	The number of times that transmitting HDLC-type packet is successful.
R_UIF_STATS_TX_OUT_COMMAND_TIMEOUT	0x11	The number of times that timeout error on transmitted HDLC-type packet.

R_UIF_STATS_TX_DRV_ERROR	0x12	The number of times that UART driver error on transmitted HDLC-type packet.
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When SYSTEM-GETINFO command is called as "InfoType" is 0x00(Statistics), all parameters of statistics are got at a time. Each parameter is 32bit data (little endian).

The image of statistics got by SYSTEM-GETINFO is shown by Figure 2-3.

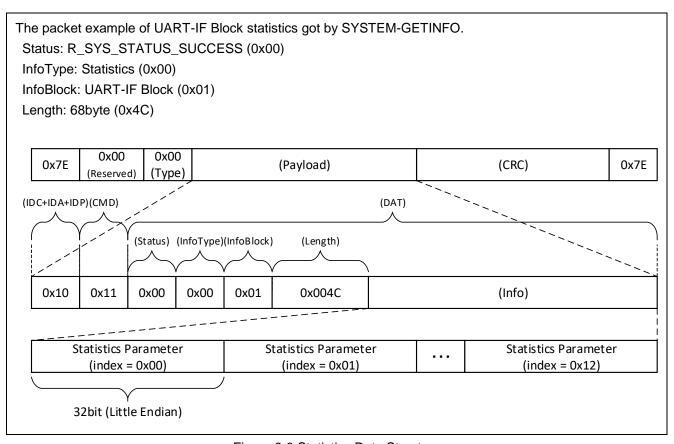


Figure 2-3 Statistics Data Structure

2.5.2 Log

Log is the ringed trace log which consisting a pair of timestamp and parameter. Timestamp and parameter are 32bit data. Then timestamp is the millisecond-scale system time which counted from the time of booting R9A06G037 firmware.

Log data is written from the top of log buffer. The write pointer is indicated as 0 data. When the write pointer reaches to the end of log buffer, it returns to the top of log buffer and log data is overwritten. Log buffer size is 1024byte.

The image of the log got by SYSTEM-GETINFO is shown by Figure 2-4.

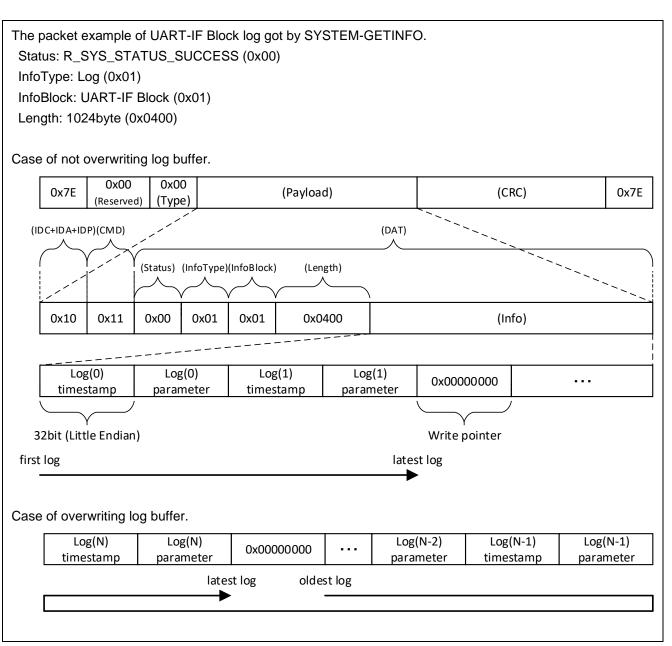


Figure 2-4 Log Data Structure

2.6 Limitation

Table 2-9 shows Serial Flash Memory that SYSTEM-SROM-XXX commands has been confirmed.

Table 2-9 Serial Flash Memory that operation has been confirmed

Model number	Manufacturer
M25PX16-VMN6TP	Micron Technology, Inc.
N25Q032A13ESC40	Micron Technology, Inc.
S25FL116K0XMFI041	Cypress Semiconductor Corp.
AT25SF321-SSHD	Adesto Technologies Corporation, Inc

3. Details of Serial Command Specification

This chapter describes about details of command specification for System Block.

3.1 SYSTEM-PING

This command is used to send the request of confirming operating conditions of R9A06G037.

3.1.1 SYSTEM-PING.request

Field	Size	Valid value	Description
IDC	1bit		-
IDA	3bit	0x00	-
IDP	4bit		-
CMD	1byte	0x00	-
DAT	Not available.		

3.1.2 SYTEM-PING.confirm

Field	Size	Valid value	Description
IDC	1bit		-
IDA	3bit	0x10	-
IDP	4bit		-
CMD	1byte	0x00	-
DAT	1byte	-	-
Status	1byte	0x00-0x01	Operating condition of R9A06G037.
			0x00: Normal operation
			others: Not operating normally

3.2 SYSTEM-VERSION

This command is used to send the request of getting the version information of R9A06G037 and System Block.

3.2.1 SYSTEM-VERSION.request

Field	Size	Valid value	Description
IDC	1bit		-
IDA	3bit	0x00	-
IDP	4bit		-
CMD	1byte	0x01	-
DAT	Not available.		

3.2.2 SYSTEM-VERSION.confirm

Field	Size	Valid value	Description
IDC	1bit		-
IDA	3bit	0x10	-
IDP	4bit		-
CMD	1byte	0x01	-
DAT	10byte	-	-
Platform	1byte	0x03	The platform version.
Standard	1byte	-	Available PLC standard. (bitmap TRUE: Available / FALSE: not available) bit0: G3-PLC bit1: PRIME others: Reserved
Band plan	2byte	-	Available band plan. (bitmap TRUE: Available / FALSE: not available) • bit0: CENELEC A • bit1: CENELEC B • bit2: FCC • bit3: ARIB • bit8: PRIME V.1.3.6 • bit9: PRIME V.1.4others: Reserved
System Block version	2byte	-	The software version of System Block. e.g. 0x0003
Hardware version	4byte	-	The version information of R9A06G037. e.g. 0x47333131

3.3 SYSTEM-RESET

This command is used to send the request of reset of R9A06G037 hardware.

3.3.1 SYSTEM-RESET.request

	Field	Size	Valid value	Description
IDC	;	1bit		-
IDA	1	3bit	0x00	-
IDF)	4bit		-
CM	D	1byte	0x02	-
DA	Т	3byte	-	-
	Mode	1byte	0x00	Reserved
	Interval	2byte	0x0000-0xFFFF	Time interval of resetting the hardware after the device receives this command. (Unit: msec)

3.4 SYSTEM-BOOTUP

This command is used to notify that R9A06G037 firmware has booted normally.

3.4.1 SYSTEM-BOOTUP.indication

Field	Size	Valid value	Description
IDC	1bit		-
IDA	3bit	0x20	-
IDP	4bit		-
CMD	1byte	0x03	-
DAT	Not available.		

3.5 SYSMTE-EVENT

This command is used to notify the event has occurred in R9A06G037.

3.5.1 SYSTEM-EVENT.indication

	Field	Size	Valid value	Description
IDC		1bit		-
IDA	1	3bit	0x20	-
IDF)	4bit		-
CN	ID	1byte	0x04	-
DA	Т	1byte	-	-
	Cause	1byte	0x01	The cause of notification. Ox01: Detected the CRC error. Ox02: Received the invalid command of System Block others: Reserved

3.6 SYSTEM-REBOOT-REQUEST

This command is used to notify that R9A06G037 firmware become the fatal condition. If this command is received, user shall reboot R9A06G037.

3.6.1 SYSTEM-REBOOT-REQUEST.indication

Field	Size	Valid value	Description
IDC	1bit		-
IDA	3bit	0x20	-
IDP	4bit		-
CMD	1byte	0x05	-
DAT	1byte	-	-
Status	1byte	-	 The condition of R9A06G037. The condition that some commands can be accepted. 0x01: G3 Block became the fatal condition. 0x02: PRIME Block became the fatal condition. 0x0F: Only DSP became the fatal condition. The condition that no command can be accepted. 0xE*: Runtime error was detected.
			 OxE⁻¹: Runtime error was detected. OxF0: Watch dog timer was timeout. OxF1: RTOS became the fatal condition. OxF2: Device driver became the fatal condition.

3.7 SYSTEM-CLEARINFO

This command is used to send the request of clearing the statistics and log for System Block (including UART-IF Block).

3.7.1 SYSTEM-CLEARINFO.request

Field	Size	Valid value	Description
IDC	1bit		-
IDA	3bit	0x00	-
IDP	4bit		-
CMD	1byte	0x10	-
DAT	2byte	-	-
InfoTypeBit	1byte	0x00-0xFF	The information type. (bitmap TRUE: clear / FALSE: not clear) bit0: Statistics bit1: Log others: Reserved If all bits are set to FALSE, all information type are cleared.
Reserved	1byte	0x00	Reserved field.

3.7.2 SYSTEM-CLEARINFO.confirm

Field	Size	Valid value	Description
IDC	1bit		-
IDA	3bit	0x10	-
IDP	4bit		-
CMD	1byte	0x10	-
DAT	1byte	-	-
Status	1byte	Refer to section 3.12	The status code R_SYS_STATUS_SUCCESS: The operation was completed successfully.

3.8 SYSTEM-GETINFO

This command is used to send the request of getting the statistics and log for System Block (including UART-IF Block).

3.8.1 SYSTEM-GETINFO.request

Field		Size	Valid value	Description
IDC		1bit		-
IDA	4	3bit	0x00	-
IDF)	4bit		-
CN	ID .	1byte	0x11	-
DA	Т	2byte	-	-
	InfoType	1byte	0x00-0x01	The information type. • 0x00: Statistics • 0x01: Log
	infoBlock	1byte	0x00-0x02	The target block. • 0x00: Reserved • 0x01: UART-IF Block (channel0) • 0x02: Reserved

3.8.2 SYSTEM-GETINFO.confirm

Field	Size	Valid value	Description
IDC	1bit		-
IDA	3bit	0x10	-
IDP	4bit		-
CMD	1byte	0x11	-
DAT	(5+Length) byte	-	-
Status	1byte	Refer to section 3.12	The status code R_SYS_STATUS_SUCCESS: The operation was completed successfully. R_SYS_STATUS_INVALID_PARAM ETER: Invalid parameter is specified.
InfoType	ype 1byte		The information type. • 0x00: Statistics • 0x01: Log
InfoBlock	1byte	0x01	The target block. Ox00: Reserved Ox01: UART-IF Block (channel0) Ox02: Reserved
Length	2byte	0-1024	The length of obtained information. (Unit: byte)
Info	(Length) byte	-	The obtained information. Refer to section 2.5.

3.9 SYSTEM-SROM-READ

This command is used to send the request of reading the Serial Flash connected with R9A06G037.

The start address of Serial Flash is mapped on 0x10000000.

3.9.1 SYSTEM-SROM-READ.request

Field		Size	Valid value	Description
IDC		1bit		-
IDA		3bit	0x00	-
IDP	1	4bit		-
CM	D	1byte	0x20	-
DA	Γ	7byte	-	-
	Address	4byte	0x10000000	The start address of the memory to
			-0x10FFFFFF	read.
	Length	2byte	0x0001-0x0400	The data length.
Reserved 1byte		0x01	Reserved field.	

3.9.2 SYSTEM-SROM-READ.confirm

Field	Size	Valid value	Description
IDC	1bit		-
IDA	3bit	0x10	-
IDP	4bit		-
CMD	1byte	0x20	-
DAT	(8+Length) byte	-	-
Status	1byte	Refer to section 3.12	 The status code R_SYS_STATUS_SUCCESS: The operation was completed successfully. R_SYS_STATUS_INVALID_PARAM ETER: Invalid parameter is specified.
Address	4byte	-	The start address of the memory read data.
Length	2byte	0x0000-0x0400	The length of read data.
Reserved	1byte	0x01	Reserved field.
Data (Length) byt		-	The read data.

3.10 SYSTEM-SROM-WRITE

This command is used to send the request of writing the Serial Flash connected with R9A06G037.

The start address of Serial Flash is mapped on 0x10000000.

3.10.1 SYSTEM-SROM-WRITE.request

Field		Size	Valid value	Description
IDC		1bit		-
IDA		3bit	0x00	-
IDF		4bit		-
CM	D	1byte	0x21	-
DA	Τ	(7+Length) byte	-	-
	Address	4byte	0x10000000	The start address of the memory to
			-0x10FFFFFF	write.
	Length	2byte	0x0001-0x0400	The data length.
	Reserved	1byte	0x01	Reserved field.
Data Length		Length	-	The data to write.

3.10.2 SYSTEM-SROM-WRITE.confirm

Field	Size	Valid value	Description
IDC	1bit		-
IDA	3bit	0x10	-
IDP	4bit		-
CMD	1byte	0x21	-
DAT	8byte	-	-
Status	1byte	Refer to section 3.12	 The status code R_SYS_STATUS_SUCCESS: The operation was completed successfully. R_SYS_STATUS_FAILURE: Serial Flash was not connected. R_SYS_STATUS_INVALID_PARAM ETER: Invalid parameter is specified.
Address	4byte	-	The starting address of the memory written data.
Length	2byte	0x0000-0x0400	The length of written data.
Reserved	1byte	0x01	Reserved field.

3.11 SYSTEM-SROM-ERASE

This command is used to send the request of erasing the Serial Flash connected with R9A06G037.

The start address of Serial Flash is mapped on 0x10000000.

3.11.1 SYSTEM-SROM-ERASE.request

Field		Size	Valid value	Description
IDC		1bit		-
IDA	4	3bit	0x00	-
IDF)	4bit		-
CN	1D	1byte	0x22	-
DA	T	8byte	-	-
	Address	4byte	0x10000000 -0x10FFFFF	The starting address of the memory to erase. This shall be aligned on erase command unit of target Serial Flash (4Kbyte/64Kbyte).
	Length	4byte	0-0x10000000	The data length. This shall be specified multiples of erase command unit of target Serial Flash (4Kbyte/64Kbyte). If 0x10000000 is specified, Full-chip erase is executed.

3.11.2 SYSTEM-SROM-ERASE.confirm

Field	Size	Valid value	Description
IDC	1bit		-
IDA	3bit	0x10	-
IDP	4bit		-
CMD	1byte	0x22	-
DAT	9byte	-	-
Status	1byte	Refer to section 3.12	The status code R_SYS_STATUS_SUCCESS: The operation was completed successfully. R_SYS_STATUS_FAILURE: Serial Flash was not connected. R_SYS_STATUS_INVALID_PARAM ETER: Invalid parameter is specified R_SYS_STATUS_TIMEOUT: The operation was timeout.
Address	4byte	-	The starting address of the memory erased data.
Length 4byte 0-0x1		0-0x10000000	The length of erased data.

3.12 Status Code

Table 3-1 shows the status code of System Block.

Table 3-1 Status Code List

Status code		Description
R_SYS_STATUS_SUCCESS	0x00	The operation was completed successfully.
R_SYS_STATUS_FAILURE	0x01	The operation was fatal error.
R_SYS_STATUS_INVALID_STATUS	0x02	The operation executed in invalid state.
R_SYS_STATUS_INVALID_PARAMETER	0x03	Invalid parameter was specified.
R_SYS_STATUS_TIMEOUT	0x04	The operation was timeout.

4. Revision History

Date	Revision	Section	Substance
2016.04.26	1.00	•	First edition.
2016.07.05	1.01	3.9	Modified valid value of Reserved field.
		3.10	- SYSTEM-SROM-READ.request
			- SYSTEM-SROM-READ.confirm
			- SYSTEM-SROM-WRITE.request
			- SYSTEM-SROM-WRITE.confirm
		3.5.1	Modified description of <i>cause</i> field in SYSTEM-EVENT.indication.
2016.09.13	1.02	2.5.1	Modified Table 2-8 Statistics parameter of UART-IF Block.
			- Modified index.
			- Added R_UIF_STATS_TX_OUT_COMMAND_TIMEOUT
			- Added R_UIF_STATS_TX_DRV_ERROR
		3.11.2	Modified the description of SYSTEM-SROM-ERASE.request.
2017.02.03	1.03	2.5.1	Modified Table 2-8 Statistics parameter of UART-IF Block.
			- Modified index.
			- Added R_UIF_STATS_RX_IN_SECURITY_SUCCESS.
			- Added R_UIF_STATS_RX_IN_SECURITY_ERROR.
			- Added R_UIF_STATS_TX_IN_SECURITY_SUCCESS.
			- Added R_UIF_STATS_TX_IN_SECURITY_ERROR.
2017.03.14	1.04	2.2.8	Added the description.
		2.6	Modified.
		3.2.2	Modified the description of "Hardware version" filed.
2017.03.23	1.05	3.6.1	Added the status "0xEX" for SYSTEM-REBOOT-
			REQUEST.indication.
2018.05.15	1.06	2.6	Added the description of Serial Flash Memory that operation has
			been confirmed.
		3.2.2	Changed a field name (Protocol -> Band plan).
		3.10.2	Added R_SYS_STATUS_FAILURE in the description of Status
			field.
		3.11.2	Added R_SYS_STATUS_FAILURE in the description of Status
			field.
0040.00.00	4.0=	-	Correction of erroneous description.
2019.06.27	1.07	3.9.1	Corrected the valid range of address filed.
		3.10.1	(0x10000000 – 0x1FFFFFFF to 0x10000000 – 0x10FFFFFF)
		3.11.1	

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Renesas Electronics America Inc. 2801 Scott Boulevard Santa Clara, CA 95050-2549, U.S.A. Tel: +1-408-588-6000, Fax: +1-408-588-6130

Renesas Electronics Canada Limited 9251 Yonge Street, Suite 8309 Richmond Hill, Ontario Canada L4C 9T3 Tel: +1-905-237-2004

Renesas Electronics Europe Limited
Dukes Meadow, Millboard Road, Bourne End, Buckinghamshire, SL8 5FH, U.K
Tel: +44-1628-585-100, Fax: +44-1628-585-900

Renesas Electronics Europe GmbH

Arcadiastrasse 10, 40472 Düsseldorf, Germany Tel: +49-211-6503-0, Fax: +49-211-6503-1327

Renesas Electronics (China) Co., Ltd.
Room 1709, Quantum Plaza, No.27 ZhiChunLu Haidian District, Beijing 100191, P.R.China Tel: +86-10-8235-1155, Fax: +86-10-8235-7679

Renesas Electronics (Shanghai) Co., Ltd.
Unit 301, Tower A, Central Towers, 555 Langao Road, Putuo District, Shanghai, P. R. China 200333
Tel: +86-21-2226-0888, Fax: +86-21-2226-0999

Renesas Electronics Hong Kong Limited
Unit 1601-1611, 16/F., Tower 2, Grand Century Place, 193 Prince Edward Road West, Mongkok, Kowloon, Hong Kong Tel: +852-2265-6688, Fax: +852 2886-9022

Renesas Electronics Taiwan Co., Ltd. 13F, No. 363, Fu Shing North Road, Taipei 10543, Taiwan Tel: +886-2-8175-9600, Fax: +886 2-8175-9670

Renesas Electronics Singapore Pte. Ltd.
80 Bendemeer Road, Unit #06-02 Hyflux Innovation Centre, Singapore 339949
Tel: +65-6213-0200, Fax: +65-6213-0300

Renesas Electronics Malaysia Sdn.Bhd.
Unit 1207, Block B, Menara Amcorp, Amcorp Trade Centre, No. 18, Jln Persiaran Barat, 46050 Petaling Jaya, Selangor Darul Ehsan, Malaysia Tel: +60-3-7955-9390, Fax: +60-3-7955-9510

Renesas Electronics India Pvt. Ltd. No.777C, 100 Feet Road, HAL II Stage, Indiranagar, Bangalore, India Tel: +91-80-67208700, Fax: +91-80-67208777

Renesas Electronics Korea Co., Ltd.

12F., 234 Teheran-ro, Gangnam-Gu, Seoul, 135-080, Korea Tel: +82-2-558-3737, Fax: +82-2-558-5141

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System Block Serial Command Specifications

