

# S1V3G340 External SPI-Flash Select Guide

## **NOTICE**

No part of this material may be reproduced or duplicated in any form or by any means without the written permission of Seiko Epson. Seiko Epson reserves the right to make changes to this material without notice. Seiko Epson does not assume any liability of any kind arising out of any inaccuracies contained in this material or due to its application or use in any product or circuit and, further, there is no representation that this material is applicable to products requiring high level reliability, such as, medical products. Moreover, no license to any intellectual property rights is granted by implication or otherwise, and there is no representation or warranty that anything made in accordance with this material will be free from any patent or copyright infringement of a third party. When exporting the products or technology described in this material, you should comply with the applicable export control laws and regulations and follow the procedures required by such laws and regulations. You are requested not to use, to resell, to export and/or to otherwise dispose of the products (and any technical information furnished, if any) for the development and/or manufacture of weapon of mass destruction or for other military purposes.

All brands or product names mentioned herein are trademarks and/or registered trademarks of their respective companies.

©SEIKO EPSON CORPORATION 2016, All rights reserved.

# **Table of Contents**

1.	De	escription	1					
2.	CI	heckpoint	2					
2	2.1	System specification CHECK	. 2					
2	2.2	SPI-Flash comannd specification CHECK	. 3					
2	2.3	READ timing specification CHECK	. 4					
2	2.4	WRITE timing specification CHECK	. 5					
2	2.5	ERASE timing specification CHECK	. 6					
Re	Revision History7							

## 1. Description

This document describes how to select external SPI-Flash for S1V3G340.

Note: Please evaluate selected SPI-Flash by a customer because of the difference about detail specification.

## Read Mode

Regarding the read mode, SPI should be complaint with S1V3G340 specification, if not S1V3G340 cannot read the voice data from SPI-Flash.

## ■ Write Mode

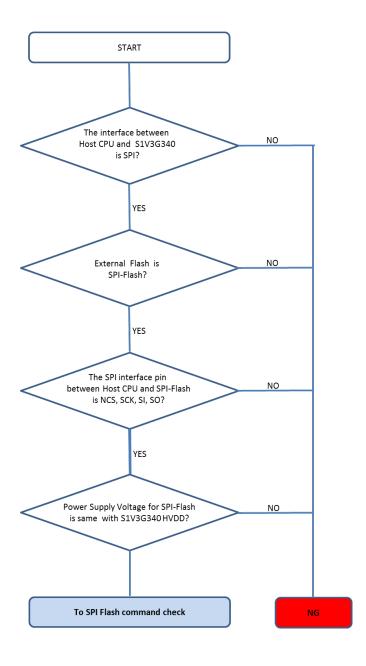
To write the data from Host CPU to SPI-Flash via S1V3G340, Host CPU should be compliant with SPI-Flash write mode specification(note: SPI frequency should be up to 1MHz because of S1V3G340 max frequency), so typically no limitation, but S1V3G340 evaluation board tool has a limitation. Please check if a customer uses S1V3G340 evaluation board tool for evaluation.



# 2. Checkpoint

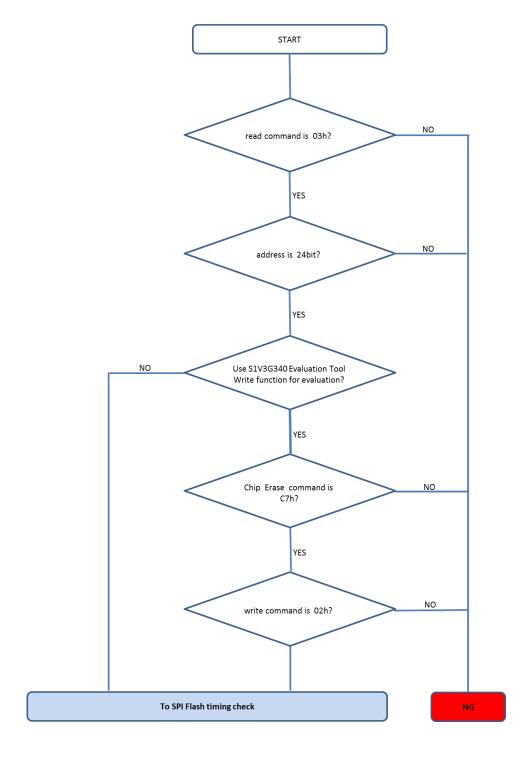
## 2.1 System specification CHECK

• Please check by following chart.

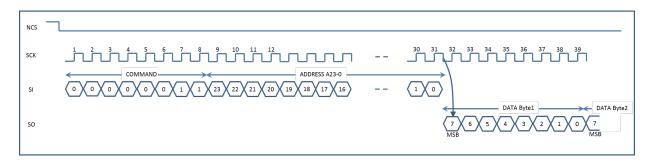


# 2.2 SPI-Flash comannd specification CHECK

Please check by following chart.



# 2.3 READ timing specification CHECK



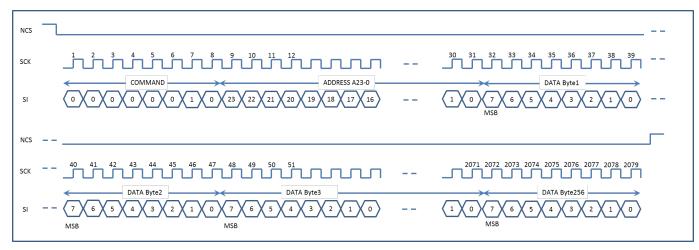
SPI-Flash Read Timing

Please check following point

① First 8 clock COMMAND : READ instruction :03h

2 After COMMAND ADDRESS 24bit3 After ADDRESS DATA: 8bit data is out

## 2.4 WRITE timing specification CHECK



SPI-Flash Write Timing

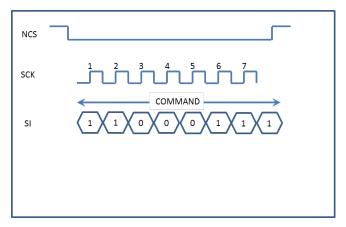
## Please check following point

① First 8 clock COMMAND: WTITE instruction:02h

2 After COMMAND ADDRESS 24bit

③ After ADDRESS DATA: input 8bit data

# 2.5 ERASE timing specification CHECK



SPI-Flash Erase Timing

Please check following point

① First 8 clock COMAMND: ERASE instruction: C7h

# **Revision History**

## Attachment-1

Rev. No.	Date	Page	Category	Contents
Rev 1.00	2016/1/12	All	new	New release.



# **International Sales Operations**

## **AMERICA**

## **EPSON ELECTRONICS AMERICA, INC.**

214 Devcon Drive, San Jose, CA 95112, USA

Phone: +1-800-228-3964 FAX: +1-408-922-0238

## **EUROPE**

#### **EPSON EUROPE ELECTRONICS GmbH**

Riesstrasse 15, 80992 Munich,

GERMANY

Phone: +49-89-14005-0 FAX: +49-89-14005-110

## **ASIA**

## EPSON (CHINA) CO., LTD.

7F, Jinbao Bldg., No.89 Jinbao St., Dongcheng District,

Beijing 100005, CHINA

Phone: +86-10-8522-1199 FAX: +86-10-8522-1125

#### **SHANGHAI BRANCH**

7F, Block B, Hi-Tech Bldg., 900 Yishan Road,

Shanghai 200233, CHINA

#### SHENZHEN BRANCH

12F, Dawning Mansion, Keji South 12th Road, Hi-Tech Park, Shenzhen 518057, CHINA

Phone: +86-755-2699-3828 FAX: +86-755-2699-3838

## **EPSON TAIWAN TECHNOLOGY & TRADING LTD.**

14F, No. 7, Song Ren Road, Taipei 110, TAIWAN

#### **EPSON SINGAPORE PTE., LTD.**

1 HarbourFront Place,

#03-02 HarbourFront Tower One, Singapore 098633 Phone: +65-6586-5500 FAX: +65-6271-3182

### SEIKO EPSON CORP. KOREA OFFICE

19F, KLI 63 Bldg., 60 Yoido-dong,

Youngdeungpo-Ku, Seoul 150-763, KOREA

Phone: +82-2-784-6027 FAX: +82-2-767-3677

# SEIKO EPSON CORP. MICRODEVICES OPERATIONS DIVISION

## **Device Sales & Marketing Department**

421-8, Hino, Hino-shi, Tokyo 191-8501, JAPAN