



GenWriter

BM-GenWriter3.0-V1.2



Brief Manual of GenWriter V3.0 (S1000 / G1000)

V1.2

March 2008

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Contents

[PART I : Introduction]

- ◆ 제품 개관
- ◆ 특징

[PART II : GenWriter H/W Equipment]

- ◆ Single Writer (S1000)
- ◆ Gang Writer (G1000)
- ◆ 구성

[PART III : How to Use]

- ◆ S1000에 HEX 파일 다운로드 방법
- ◆ GenWriter를 이용한 MCU 프로그래밍 방법

[PART IV : GenWriter Manager]

- ◆ 소프트웨어

[Appendix : LCD Message]

- ◆ 정보 메시지
- ◆ 에러 메시지

PART I : Introduction

- ◆ 제품 개관

- ◆ 특징

1. 제품 개관

- ◆ **GenWriter V3.0 is CORERIVER's exclusive romwriter.**
- ◆ **It supports all CORERIVER MCU Families.**
 - ✓ **GenWriter V3.0 S1000 is single romwriter of stand alone mode.**
 - ✓ **GenWriter V3.0 G1000 is 4-Gang romwriter.**

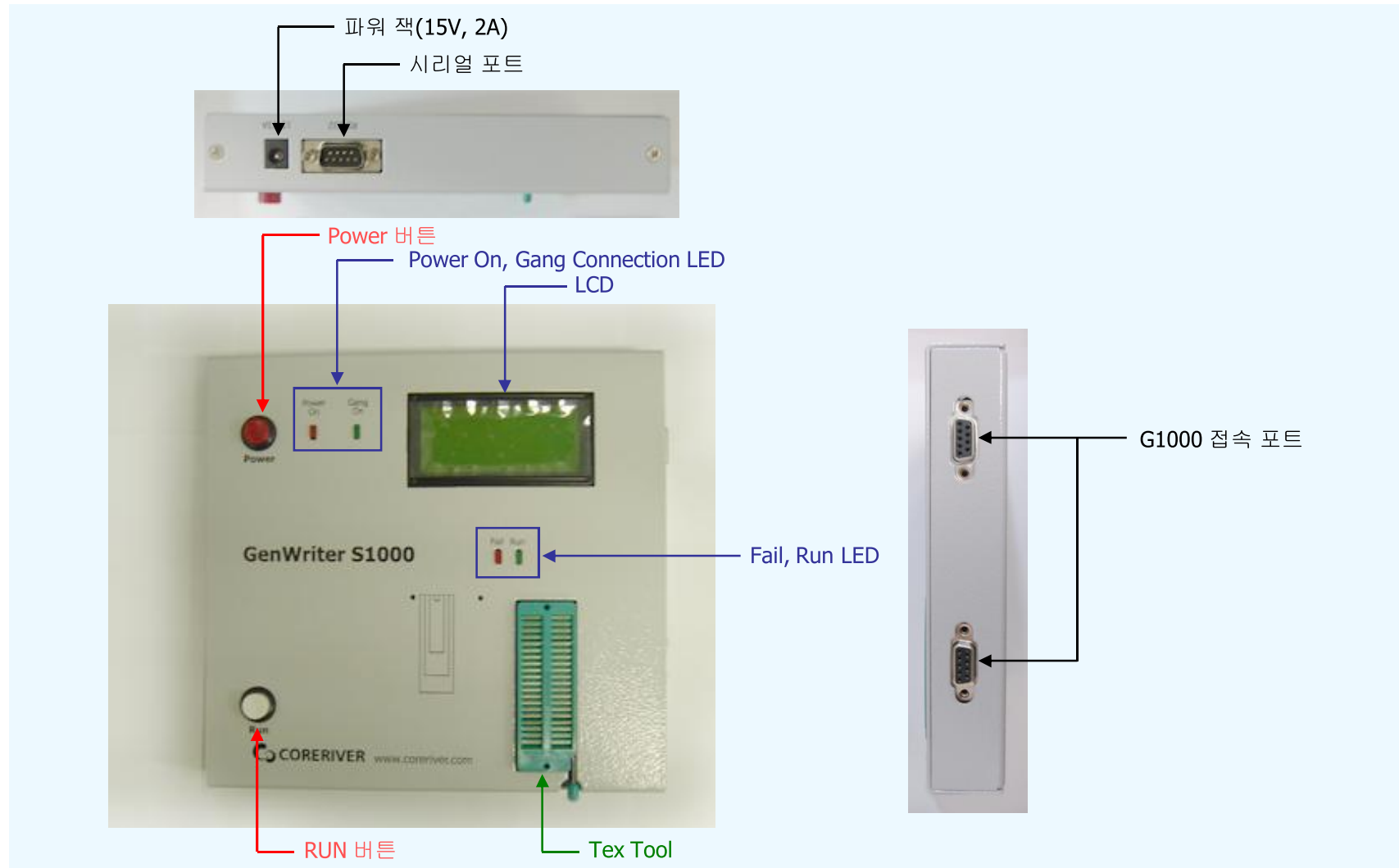
2. 특징

- ◆ Supply Voltage : 12V DC (3.0A)
- ◆ Display
 - ✓ LCD Display : Device, Hex Name, Success and Fail Message Display
 - ✓ LED Display : Run and Fail Display
- ◆ Supported File Format
 - ✓ Intel HEX, ASCII HEX
- ◆ Adapter list (Option)
 - ✓ 28SOIC/44PLCC for MiDAS1.0 Family
 - ✓ 8/16/20 SOIC for MiDAS1.1 Family
 - ✓ 44MQ/64LQ/64TQ/100TQ for MiDAS2.0 Family
 - ✓ 28SOP/32LQ for MiDAS2.1 Family
 - ✓ 20SPDIP/20SOIC/20MLF/16SPDIP/16SOIC/8SP DIP/8SOIC for MiDAS2.2 Family
 - ✓ 32MLF/44PQFP/44LQFP for MiDAS3.0 Family
 - ✓ 8SOP/20SOP/24SOP for ATOM1.0 Family
 - ✓ 32-LQ/32-MLF for RoboCore1.0 Family
 - ✓ 20QFN/20SOIC/8SOIC for TouchCore1.0 Family
- ◆ Tool Configuration
 - ✓ Single : GenWriterV3.0 S1000
 - ✓ 4Gang : GenWriterV3.0 G1000
- ◆ Supported Device :
 - ✓ MiDAS1.0
 - ✓ MiDAS1.1
 - ✓ MiDAS2.0
 - ✓ MiDAS2.1
 - ✓ MiDAS2.2
 - ✓ MiDAS3.0
 - ✓ ATOM1.0
 - ✓ RoboCore1.0
 - ✓ TouchCore1.0

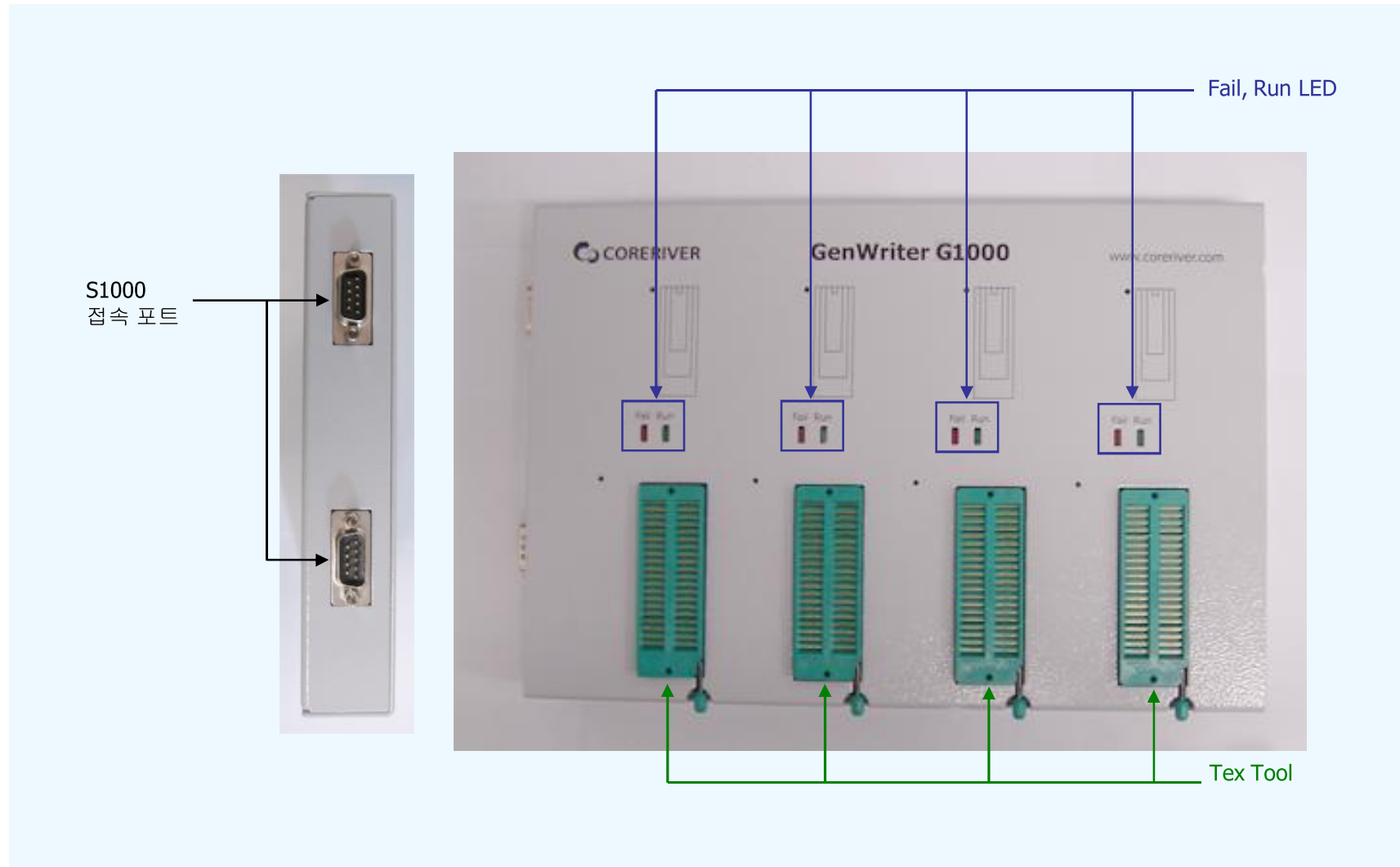
PART II : GenWriter H/W Equipment

- ◆ Single Writer (S1000)
- ◆ Gang Writer (G1000)
- ◆ 구성

1. Single Writer (S1000)

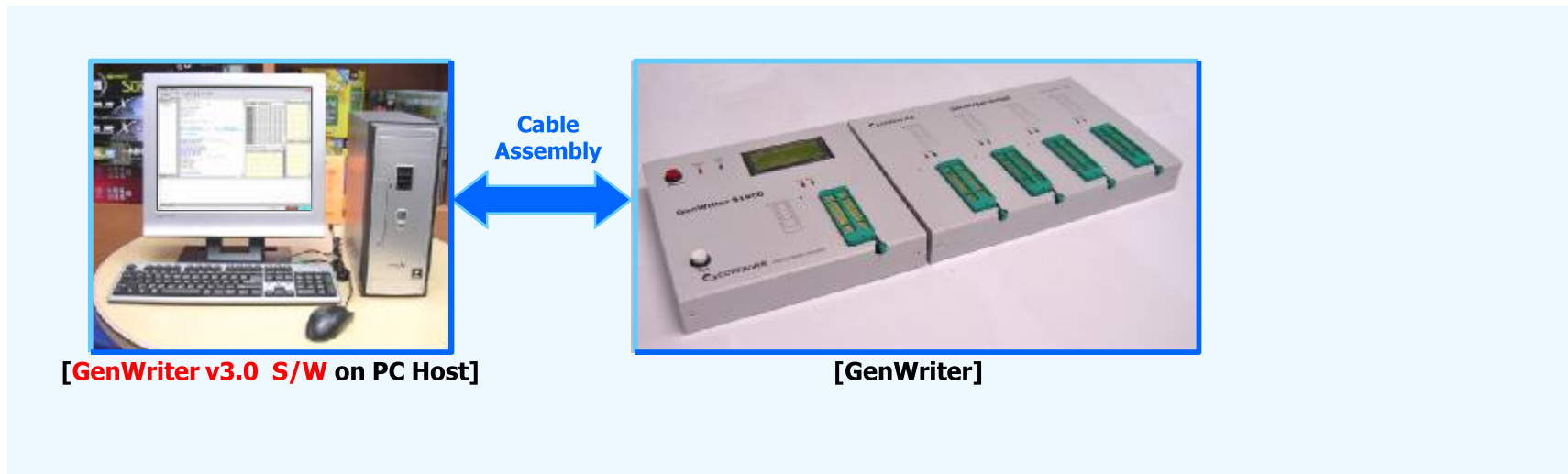


2. Gang Writer (G1000)



3. 구성

- ◆ GenWriter 프로그래밍 환경.



- ◆ 부속물.



PART III : How to Use

- ◆ S1000에 HEX 파일 다운로드 방법
- ◆ GenWriter를 이용한 MCU 프로그래밍 방법

1. S1000에 HEX 파일 다운로드 방법

1. S1000과 PC를 준비한다.
 - 1) PC에 GenWriter Manager를 설치한다.



[GenWriter Manager on PC Host]



[S1000]

2. 부속물을 준비한다.
 - 1) Serial cable.
 - 2) Power adaptor. (15V, 2A)

Serial Cable



Power Adaptor
(SMPS, 15V, 2A)

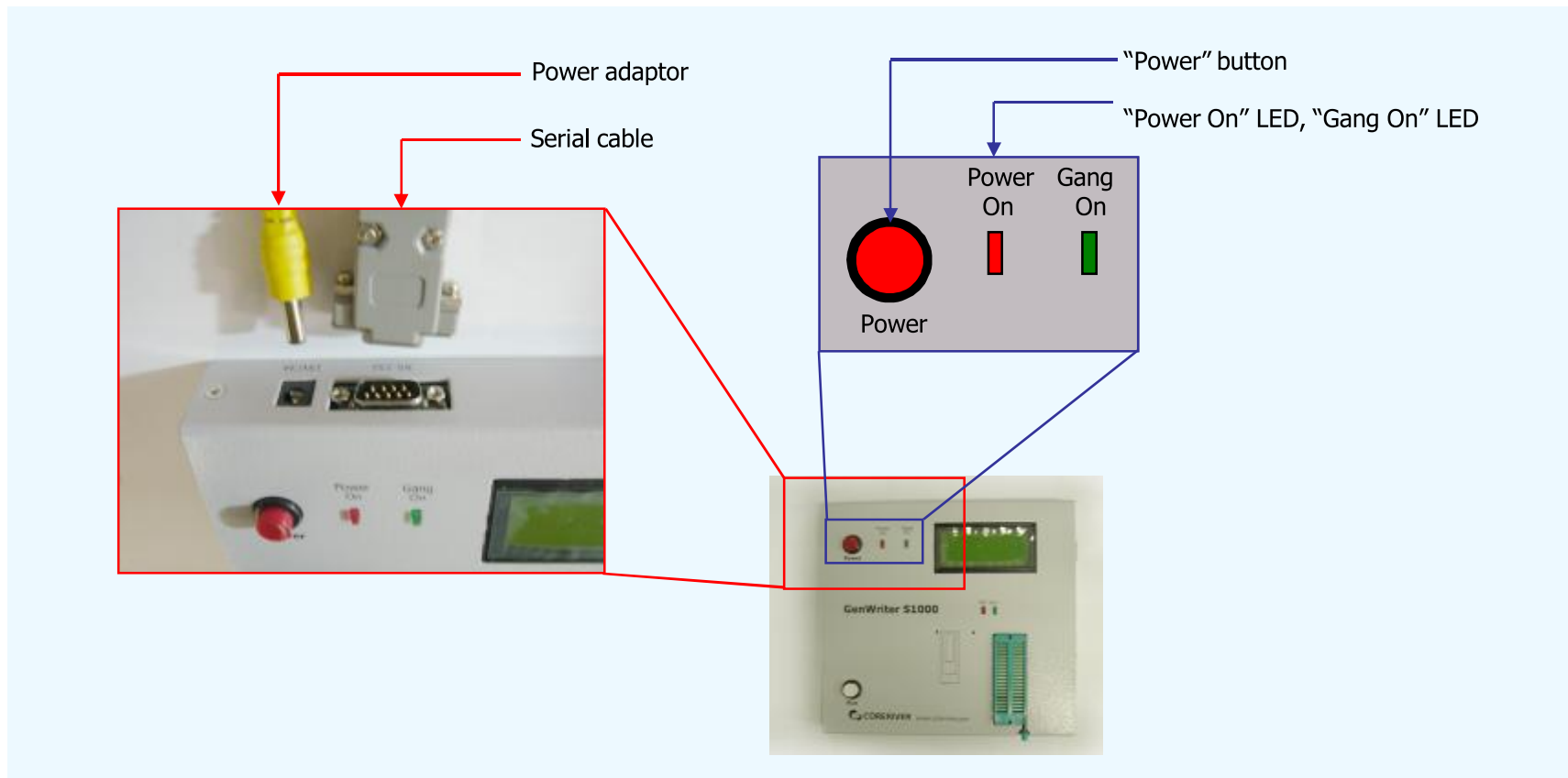


1. S1000에 HEX 파일 다운로드 방법

3. Serial cable을 이용해서 S1000을 PC에 연결한다.

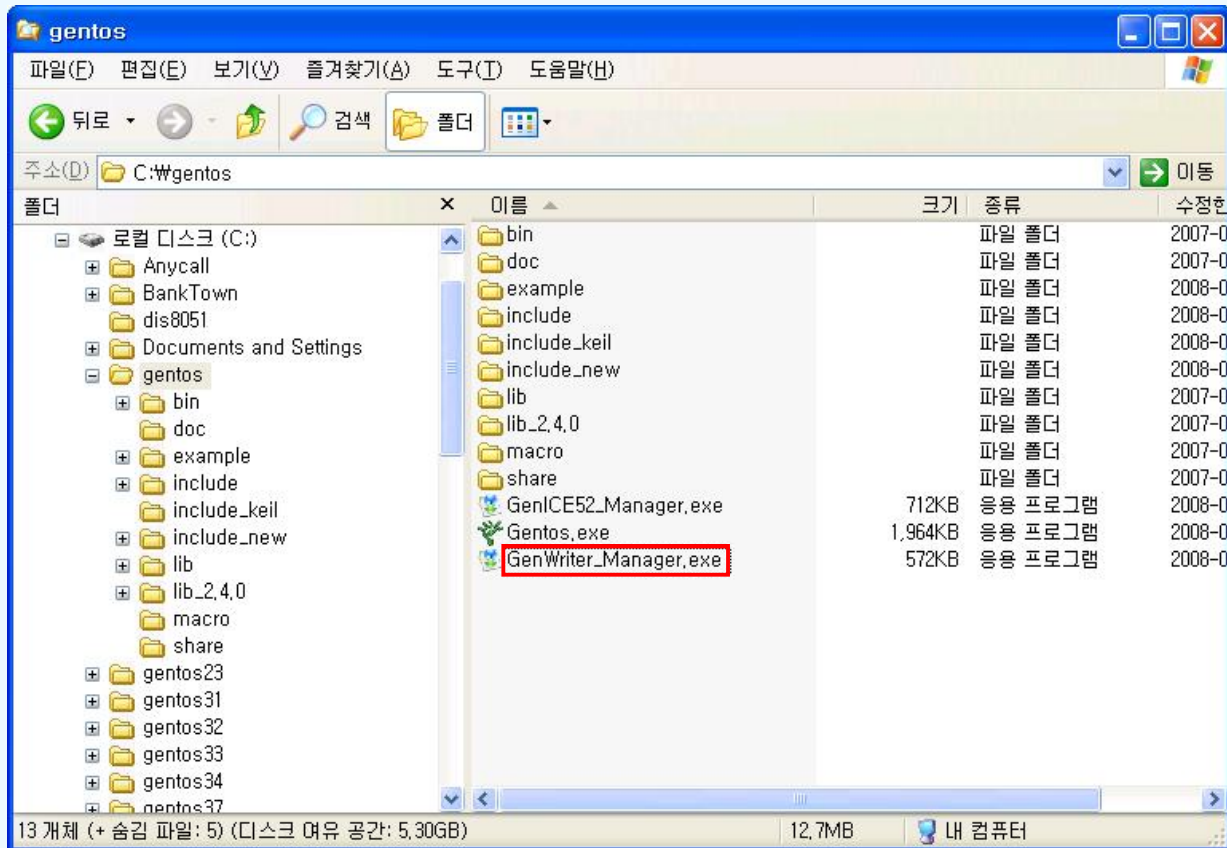
1) S1000의 전원이 꺼져있는지 확인한다.

4. S1000의 전원을 켜다.



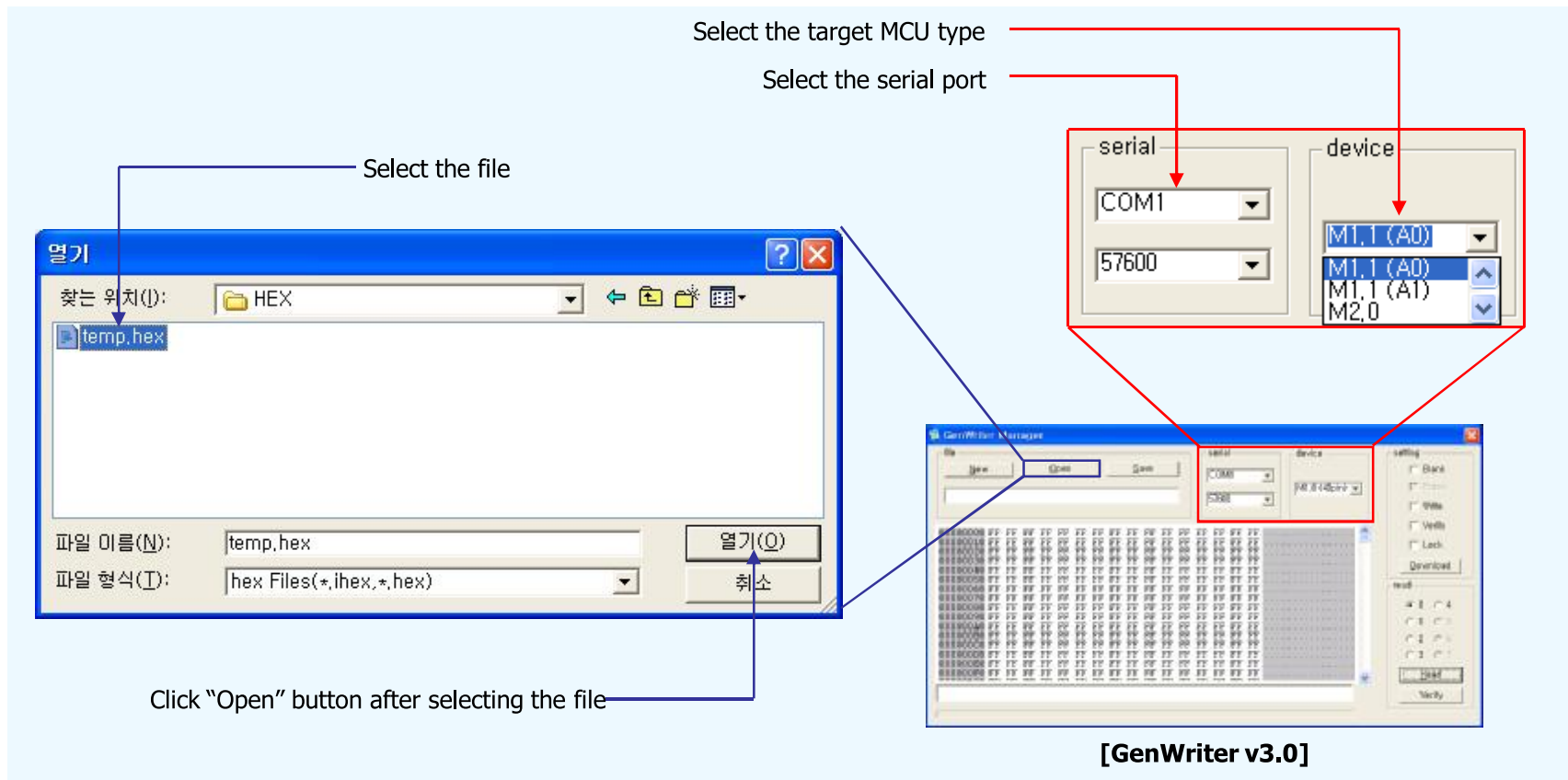
1. S1000에 HEX 파일 다운로드 방법

5. GenWriter Manager를 실행한다.



1. S1000에 HEX 파일 다운로드 방법

6. "serial"과 "device"를 설정한다.
 - 1) Serial = COM1, 57600 (baudrate).
 - 2) device = Target MCU type.
7. "Open" 버튼을 클릭해서 HEX file을 연다.



1. S1000에 HEX 파일 다운로드 방법

8. "setting" command를 설정한다. (Blank, Erase, Write, Verify and Lock)

The image shows the GenWriter Manager software interface. A 'setting' dialog box is open, containing the following options:

- Blank
- Erase
- Write
- Verify
- Lock
-

Arrows point from each option to its description:

- Blank** : Check if the MCU ROM is blank status
- Erase** : Erase all data in the MCU ROM (Flash ROM type only)
- Write** : Program the MCU ROM using the HEX code in the Buffer
- Verify** : Verify between the MCU ROM Code and the HEX Code in the Buffer
- Lock** : Check if the MCU ROM is locked
- Download** : Download the "setting" command and the HEX Code

The main GenWriter Manager window shows a hex editor with memory addresses from 00000000 to 000000E0. A progress bar is visible at the bottom of the hex editor, and a 'Verify' button is located below it. An arrow points to the progress bar with the text: "See the status for checking the progression."

9. "Download" 버튼을 클릭해서 "setting" command와 HEX Code를 다운로드 한다.

1. S1000에 HEX 파일 다운로드 방법

10. 결과를 확인한다.

The screenshot shows the GenWriter Manager interface with the following details:

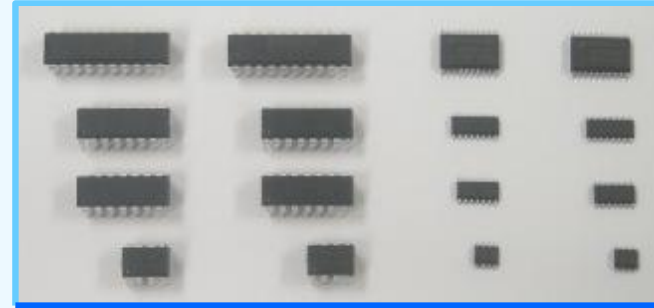
- File name (checksum):** m11_test_full.hex - (checksum : 0xE800)
- serial:** COM1, 57600
- device:** M1.0 (40pin)
- setting:** Blank, Erase, Write, Verify, Lock (all unchecked)
- Download button:** Present and active.
- read section:** Radio buttons for 0, 1, 2, 3, 4, 5, 6, 7; Read and Verify buttons.
- Start:** Command line: \$AS_ffff0m11_test_full.hex#F4
- Downloading:** Progress bar showing "Auto Result Good!"
- Complete (checksum):** Status bar showing "Data transfered & Cheksum[0xf800] OK!"

2. GenWriter를 이용한 MCU 프로그래밍 방법

1. GenWriter와 MCU를 준비한다.



[GenWriter]



[MiDAS 1.1 Family]

2. 부속물을 준비한다.

- 1) Power adaptor. (15V, 2A)
- 2) Socket.

Power Adaptor
(SMPS, 15V, 2Ah)



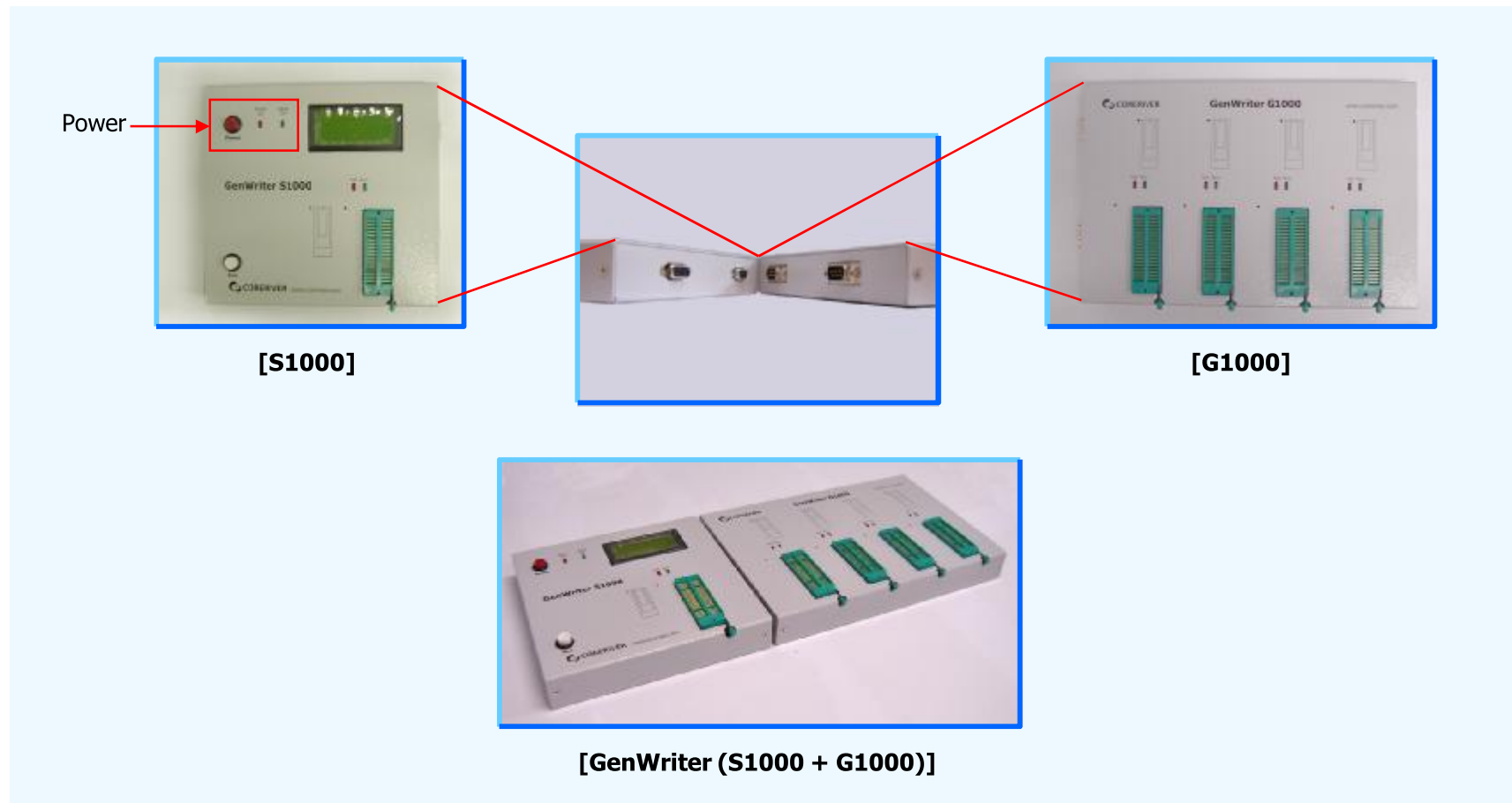
Socket



2. GenWriter를 이용한 MCU 프로그래밍 방법

3. S1000과 G1000를 결합한다.

- 1) S1000는 1 device 프로그래밍이 가능하다.
- 2) G1000는 4 device 프로그래밍이 가능하다.

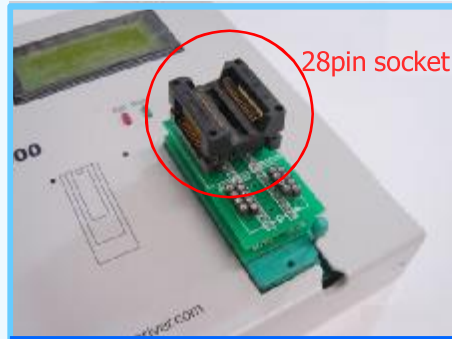


2. GenWriter를 이용한 MCU 프로그래밍 방법

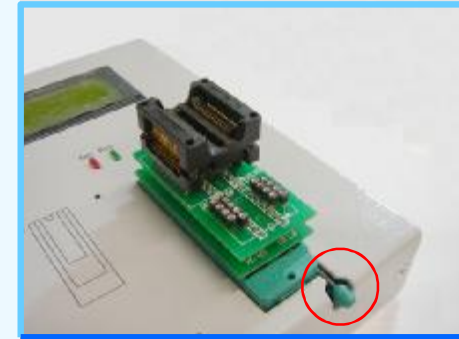
4. GenWriter에 소켓을 결합한다.
 - 1) Target MCU에 맞는 소켓을 준비한다.



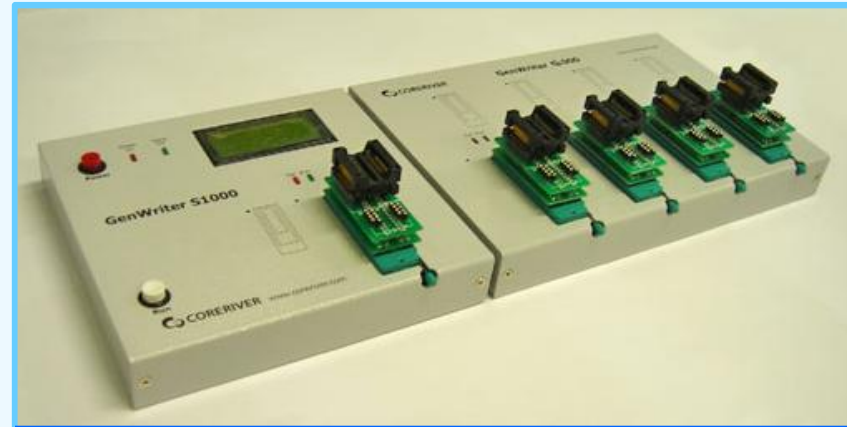
1. Raise the lever



2. Combine the socket



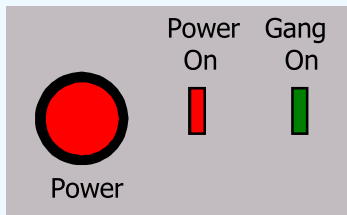
3. Get down the lever



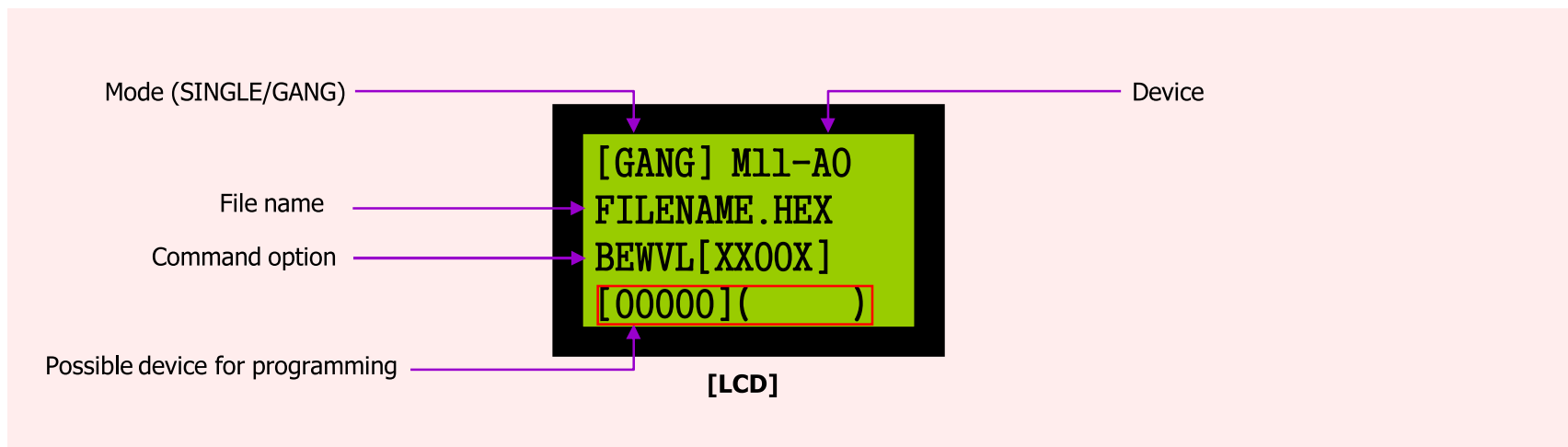
[GenWriter combined with the socket]

2. GenWriter를 이용한 MCU 프로그래밍 방법

5. MCU를 소켓에 고정한다.
6. S1000의 전원을 켜다.
 - 1) "Power On" LED로 확인한다.



7. LCD를 확인한다. (Single mode/Gang mode, target MCU, File, Command)



2. GenWriter를 이용한 MCU 프로그래밍 방법

8. 'RUN' 버튼을 눌러서 실행한다.



[S1000]

9. 동작을 확인한다.

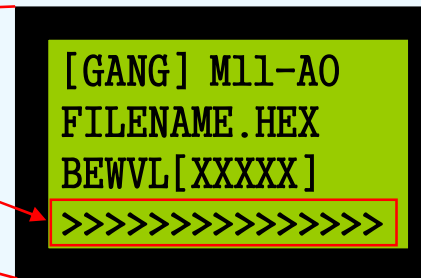


[S1000]



green LED blinking

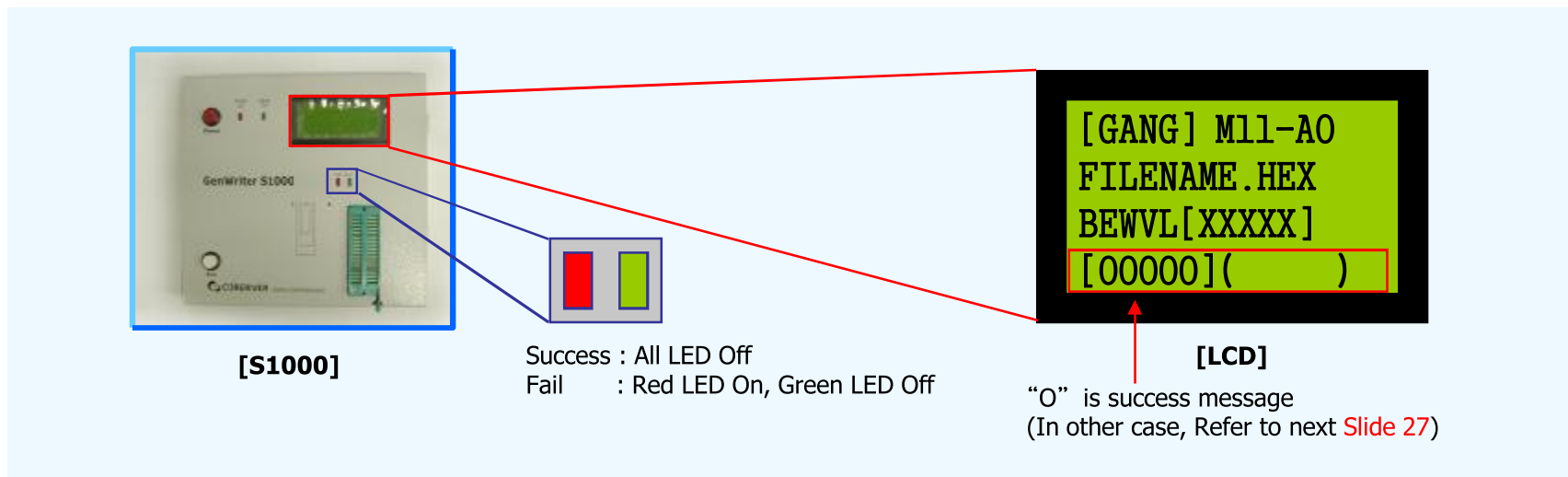
programming



[LCD]

2. GenWriter를 이용한 MCU 프로그래밍 방법

10. 완료 후 MCU를 제거한다.



PART IV : GenWriter Manager

◆ 소프트웨어

1. 소프트웨어

제목표시줄 : 버전정보
 버퍼 초기화
 버퍼에 HEX 파일(*.ihex;*.hex)을 불러온다.
 시리얼 포트 설정
 Device 설정

Setting :
 Slide 15참조.

MCU의 롬을 읽는다.
 MCU의 롬과 버퍼의 데이터를 비교한다

진행상황을 확인 할 수 있다.
 MCU롬에 다운 받은 버퍼의 데이터를 확인하거나 수정 할 수 있다.

파일명 & checksum value

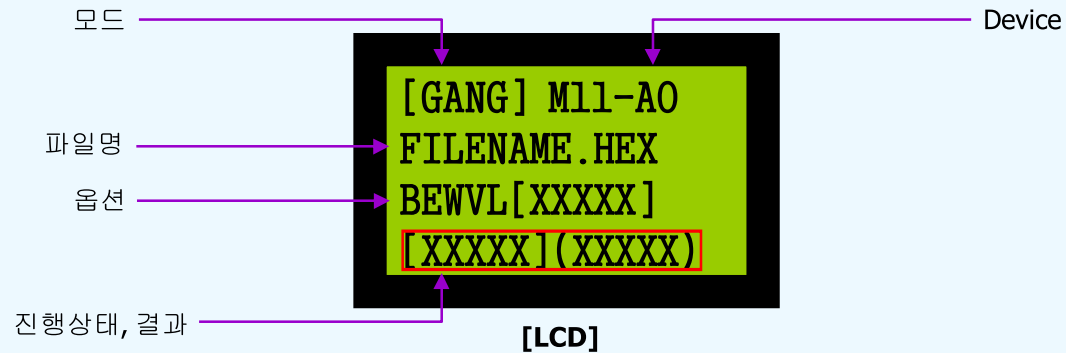
The screenshot shows the GenWriter Manager interface. The 'file' section has 'New', 'Open', and 'Save' buttons. The 'serial' section has dropdowns for 'COM1' and '57600'. The 'device' section has a dropdown for 'M1.0 (40pin)'. The 'setting' section has checkboxes for 'Blank', 'Erase', 'Write', 'Verify', and 'Lock', along with a 'Download' button. The 'read' section has radio buttons for '0-4', '1-5', '2-6', and '3-7', and buttons for 'Head' and 'Verify'. The main area displays a hex dump of memory addresses from 00000000 to 000000F0, with each line showing a hex value (mostly FF) and a corresponding buffer value. Annotations with arrows point to these various elements.

Appendix : LCD Message

◆ 정보 메시지

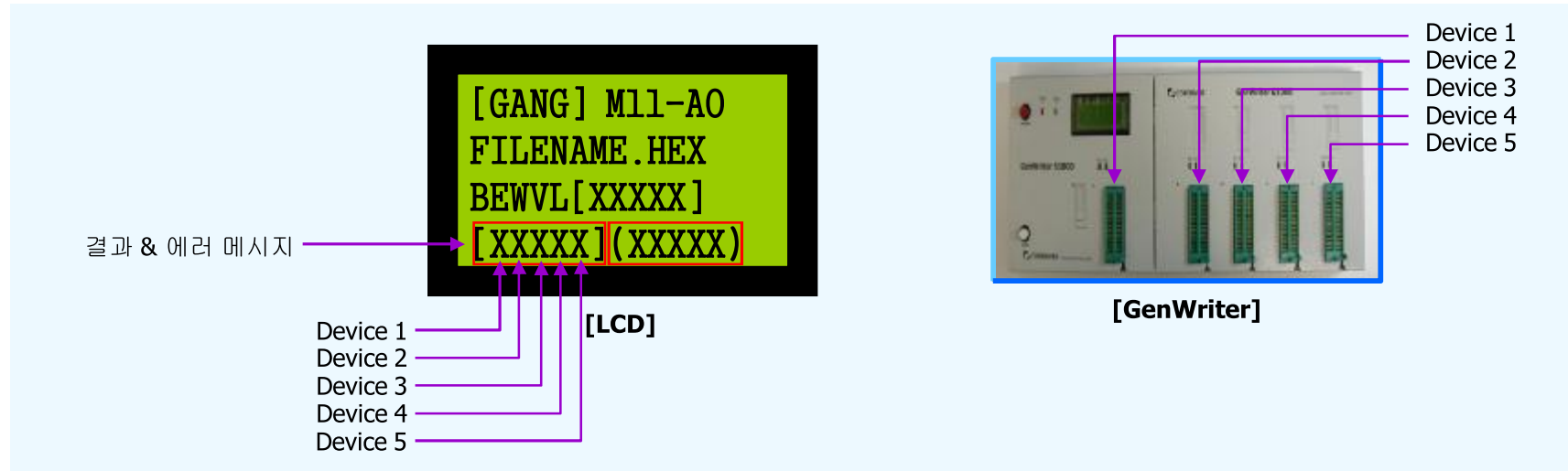
◆ 에러 메시지

1. 정보 메시지



- ◆ 모드
 - SINGLE : Single Writer Mode.
 - GANG : Gang Writer Mode.
- ◆ **DEVICE** : Target MCU의 타입
 - ※ [note] 설정값과 device가 다르면 GenWriter나 device가 데미지를 입을 수 있다.
- ◆ 파일명
 - GenWriter에 다운로드 되어있는 HEX file.
 - 다운로드 된 파일이 없으면 'NO FILE'이 출력.
- ◆ 옵션 : 설정되어있는 옵션 (**B**lank, **E**rase, **W**rite, **V**erify, **L**ock), 선택하면 : O 선택하지 않으면 : X
- ◆ 결과 : 정상 종료시 "O"출력, 그 외의 경우는 Slide 27 참조.

2. 에러 메시지



1. 에러 메시지

- 1) [X] - 시작 실패 : 소켓에 device가 없거나 접촉불량인 경우.
- 2) [S] - Device-code를 읽어 오는데 실패.
- 3) [C] - Device에 Lock가 걸려있는 경우.
- 4) [B] - Device가 Blank가 아닌 경우.
- 5) [P] - 쓰기 실패.
- 6) [R] - 읽기 실패.
- 7) [V] - 버퍼와 device의 ROM의 코드가 다른 경우.
- 8) [L] - Lock을 거는데 실패.