



USB Disk Production Tool User Manual

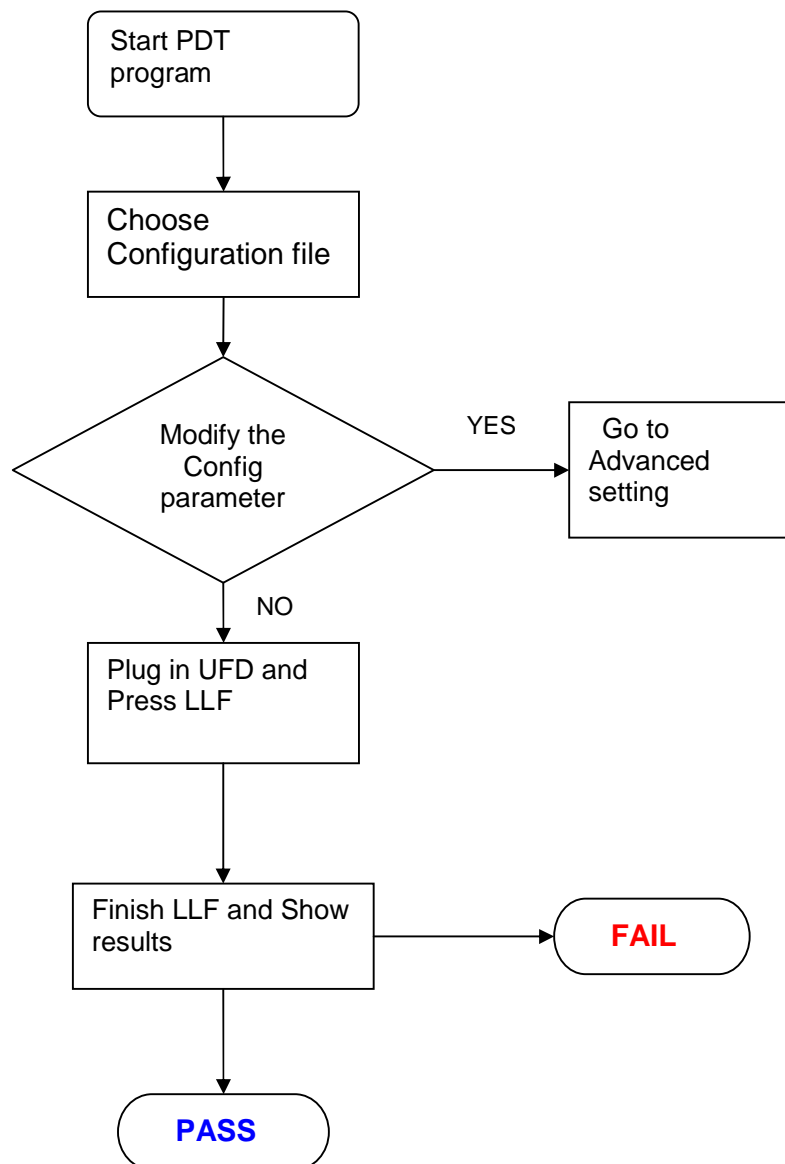
Rev: 1.0

Date:2008/01/09

1. Preface:

All UFD with SK62XX series , need to use PDT program to perform LLF before using to Device . PDT also provide FLASH basic testing & partition & CD Rom function .

2. Operation Flow Chart:



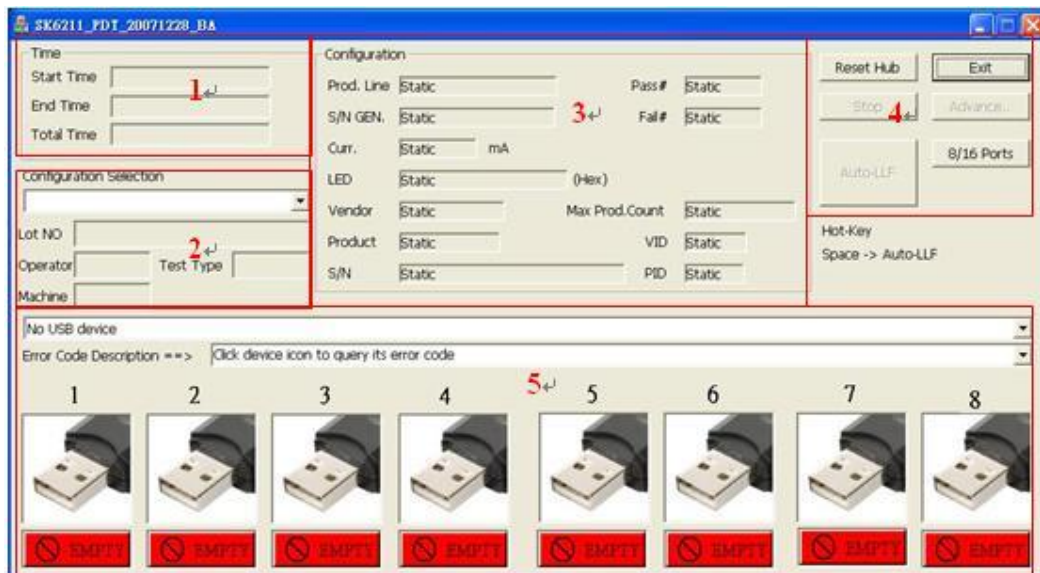
3. PDT Program:

Double Click the Icon to start Skymedi UFD PDT



3-1 Main Window

Following sections describe detail function of this operating window



Time	
Start Time	2006/01/24 14:59:46
End Time	2006/01/24 15:00:03
Total Time	17 Seconds

To select a configuration file

Configuration Selection

K9F4G08U0M_1_Byte

default_config

K9F4G08U0M_1_Byte

K9GAG08U0M_4_Byte

K9HAG08U0M_4_Byte

3-1-3. Configuration

Configuration					
Prod. Line	988	Pass#	249		
S/N GEN.	(2) Increase	Fail#	48		
Curr.	100 mA				
LED	18-04-64-32-07-07-00 (Hex)				
Vendor	SKY	Max Prod.Count	999		
Product	USB	VID	1516		
S/N	0000000000000000000013B36DB0	PID	1603		

3-1-4. Function description of each Push Buttons



- (1). Reset Hub
- (2). Stop: Test Stop
- (3). Exit: Finish and exit the Production Tool
- (4). Advance: Advance setting, the Environment Setting window will pop up and user can edit config file on this window
- (5). Auto-LLF: Start test when this button is pressed then Tool start execute USB Disk Low Level Format function
- (6). 8/16 Ports: Show 8 or 16 port

3-1-5. Status and Error Description



USB Port Status Icon



- (1). Empty: Indicate there is no device in the USB port



(2). No Match: There is a UFD in DUT port but the device configuration is different to the selected config file. The device configuration means:

- Controller Part Number
- Flash Part Number
- Number of Flash



(3). Matched: There is a UFD in DUT port and its configuration is matched to the selected config file.



(4). Busy: If click Auto-LLF or press Space bar, the Matched DUT port start perform the card initialization activity



(5). Fail: Show this icon if initial Fail. The icon also indicates the Error Code. Engineer can press the "Error Code Description" pull -down bar to check the Error Code meaning



(6). Pass: Indicate the Card Initial Pass and show SN of device

3.2 Test Configuration File Setting:

Be note, user should key in correct password otherwise any editing function are not available. The default password is "123456". Engineer can change password in this window. Following section describe each editing function.

Environment setting

LINE: 899 0~999
 VID: 1516 Hex(EX: 023A)
 PID: 1603 Hex(EX: 023A)
 Vendor Name: SKY
 Product Name: USB
 S/N: 200706200000000059188019 Random
 S/N Gen: (2) Increase
 Revision: 1.00 Disk Type: Removable

RESET PASS/FAIL RECORD
 Max Passed Number: 999999999
 Multi-Partition
 Config File: TC58NVG3D1D_RW003
 Delete Save

Password
 Password:
 Check
 New:
 Change

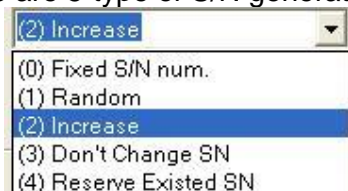
LED Idle: (0) FLASH VERY SLOWLY
 LED Strength: 0
 Curr: 100 (0~500 mA is valid)
 Format Label: LUN0 Format Type: auto
 Read/Write Test: Quick Test 3 % (0-100)
☐ Fixed Flash Size: 2048 MB
☐ Enable Pre-Copy File ☐ Erase All
 PreCopy Path: D:\Test\Tmp Browse
 Hidden Area: 0 Sectors(Multiple of 8)

Flash Option
 Reserved Spare Area: By Flash Spec. 50 % Code Bank Ver: C071220A_F071227A
 Range: Single Channel 0.0 - 99.0, Dual Channel 0.0 - 49.0
 Controller: SK6211
 Part Name in Config: TC58NVG3D1D
 Flash Selection: Part Name in Config
 ExtInterleave in Config: None
 External Interleave: None

Card Size Option
 Card Size: (1) User Defined Density
 User Defined Card Size:
 400 300 50 50
 16 0 0 0

3-2-1. UFD Information Setting:

- (1). Prod. Line: Production Line ID
- (2). VID: Vender ID
- (3). PID: Provider ID
- (4). Vender Name: USB device vender name
- (5). Product Name: USB device Product name
- (6). Revision: USB device reversion code
- (7). S/N: Serial Number
- (8). S/N GEN.: Serial number generator selection
There are 5 type of S/N generate function can be selected.

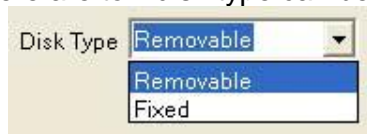


- Fixed S/N num.: The assigned S/N is fixed for every USB Disk
- Random: Randomly assign S/N for each USB Disk
- Increase: Incrementally assign S/N for each USB Disk
- Don't Change SN
- Reserve Existed SN

- (9). Version: Set the version number of USB Disk.

- (10). Disk Type

There are tow disk type can be select



- Removable
- Fixed

- To reset the Pass and Fail count. When this button is pressed, the main window Pass/Fail count will be reset.

Pass# 249
Fail# 49

- (5). Save: Press to save the Config File

3-2-3. Change Password :

Provide the change password function of Environment Window.

- (1). Password:
- (2). Check:
- (3). New:
- (4). Change:

3-2-4. Flash Option:

- (1). Reserved Spare Area:

- **By Flash Spec:** Depend on the Flash memory, Tool will automatic set the reserved block number.
- **Manual Set:** Allow use define reserved block size. Be note, the larger reserved block size make smaller disk size. The available reserved range are depends on Bus channel.

Bus Channel	Spare Area Range (%)
Single	0 ~ 99
Dual	0 ~ 49

- (2). Code Bank Ver :

(3). Controller

For controller part number select. If there is a USB disk on USB port, the tool will auto detect the controller part number and display on this field.

(4). Part Name in Config

Show the selected Flash part number of Config file.

(5). Flash Selection

For Flash Memory part number select. If there is a USB disk on USB port, the tool will auto detect the Flash Memory ID and display its part number this field. However, some Flash ID may map to more than two Flash PN. In this case tool will display all mapped Flash PN for use select. User has to select correct Flash PN here.

(6).ExtInterleave in Config

Show the selected Inter leave level of the selected Config file.

(7). External Interleave

Allow user set Inter Leave Level here. If there is a USB disk on USB port, tool will auto detect the data bus channel of controller and Flash and the number of Flash CE and shows all available interleave level for selection.

There are 4 possible Interleave Level for selection.

- None (or Disable), disable interleave function.
- 2-Way, 2 Level interleave.
- 4-Way, 4 Level interleave.

Following table shows all possible interleave level for different Bus channel and FC E number.

	Byte Mode		Word Mode	
CE	Interleave 2	Interleave 4	Interleave 2	Interleave 4
1	X	X	X	X
2	O	X	O	X
4	X	O	O	X

3-2-5. UFD Property Setting:

- (1). LED Idle: LED flash frequency setting, there are 5 different flash frequency are allowed to be set for USB Disk LED.

- (2). LED Strength : LED brightness adjusting , there are 7 brightness levels can be selected. The higher level makes the higher brightness.

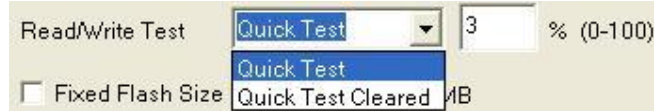
- (3). Current (0~500mA) : The max. current consumption setting.

- (4). Format Label: Disk Label of FAT format

- (5). Format Type: FAT Type
The Disk format selection

- Auto: Tool will automatic select format type depends on density of disk size.
- FAT16: FAT16 format
- FAT32: FAT32 format
- None : won't do any format after LowLevelFormat

(6). R/W Test: Write and Read Test before device has been formatted



- Quick Test: Partial size test
When Quick Test is selected, user should set how many percentage of card size would expect to be tested.
- Quick Test Cleared:
When Quick Test has done, clear data written in the device (not suggest, cause more time when MP)

(7). Fixed Flash Size

When this function is enabled, tool will fix the disk size as the defined value. If a disk that size not matched to the defined size, the tool will show error when test done.

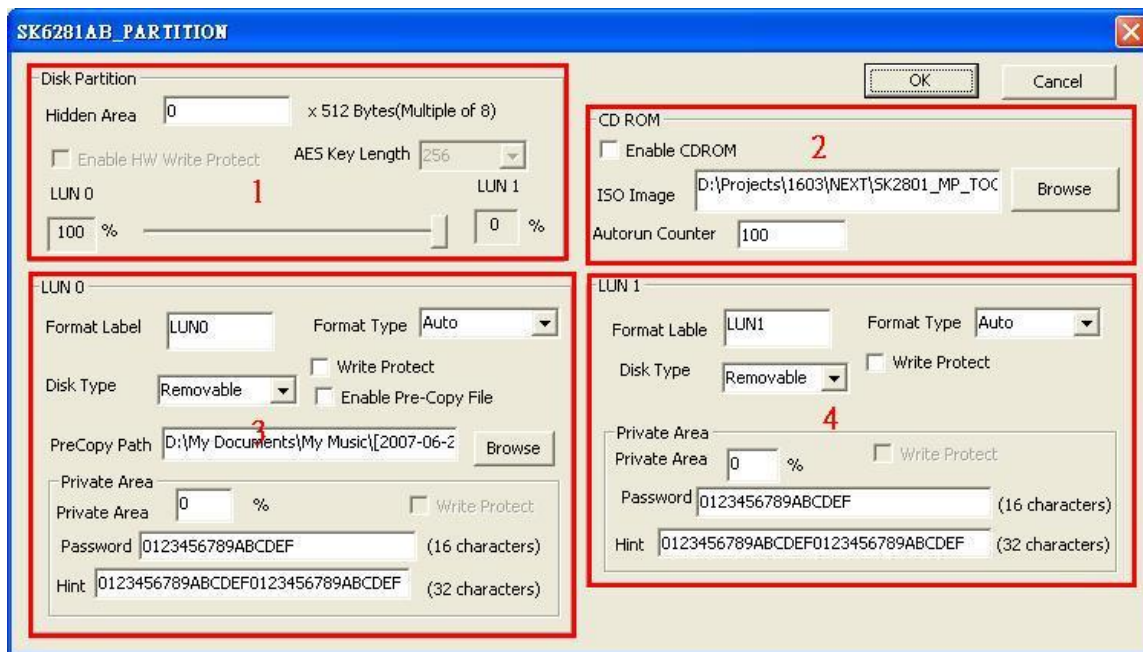
(8). Enable Pre-Copy File

(9). Erase All

(10). PreCopy Path

(11). Hidden Area: (Max 4KB)

4. Multi-Partition: (For SK6281AB only)



4-1. Disk Partition:

- (1). Hidden Area: (Max 8KB)
- (2). Enable HW Write Protect:
- (3). AES Key Length:
- (4). LUN0/1:

4-2. CD ROM:

- (1). Enable CDROM:
- (2). ISO Image path:
- (3). Autorun Counter: (second)

4-3. LUN0:

- (1). Format Label: Set label name
- (2). Format Type:
 - Auto: Base on Flash density
 - FAT16: Format FAT16
 - FAT32: Format FAT32
- (3). Disk Type
 - Removable:
 - Fixed:
- (4). Write Protect:
- (5). Enable Pre-Copy File:
- (6). PreCopy Path:

(7). Private Area:
-Write Protect:

(8). Password:
(Max 16 digi)

(9). Hint:
(Max 32 digi)

4-4. LUN1:

(1). Format Label: Set label name

(2). Format Type:
- Auto: Base on Flash density
- FAT16: Format FAT16
- FAT32: Format FAT32

(3). Disk Type
- Removable:
- Fixed:

(4). Write Protect:

(5). Enable Pre-Copy File:

(6). PreCopy Path:

(7). Private Area:
-Write Protect:

(8). Password:
(Max 16 digi)

(9). Hint:
(Max 32 digi)