

Tanex ROM D3 Modifications

Mod 01 TUG compatibility

Source: [MMM](#) page 3

Detail: The original Tangerine BASIC (Mod 0) loaded #\$0F into the RUNIND register when BASIC is running. TUGBUG uses this register for flagging other states and therefore needs just the BASIC running flag to be updated. Mod 01 corrects this by loading #\$01 into this register instead.

Address	Mod 0 code		Mod 1 code	
E2ED	A90F	LDA #\$0F	A901	LDA #\$01

Mod 02 Read cursor if not on the bottom line

Source: [MMM](#) page 3

Detail: The original Tangerine BASIC only reads any direct command if the cursor is on the bottom line of the screen. Mod 02 enables the command to be read wherever the cursor is on the screen.

Address	Mod 0 code		Mod 2 code	
E266	ADEA03	LDA #\$03EA	B10A	LDA (0A),Y
			EA	NOP
E280	ADEA03	LDA #\$03EA	20E3E7	JSR \$E7E3
E7E3	FFFF		A000	LDY #\$0
E7E5	FFFF		B10A	LDA (\$0A),Y
E7E7	FF		60	RTS

Mod 03 Exit EDIT mode with cursor on the bottom line

Source: [MMM](#) page 3

Detail: The original Tangerine BASIC does not move the cursor to the bottom line when exiting the EDIT mode. Mod 03 corrects this.

Address	Mod 0 code		Mod 3 code	
E645	2073FE	JSR \$FE73	20E8E7	JSR \$E7E8
E7E8	FFFF		A9E0	LDA #\$E0
E7EA	FFFF		B50A	STA \$0A
E7EC	FFFF		A903	LDA #\$03
E7EE	FFFF		850B	STA \$0B
E7F0	FFFFFF		4C73FE	JSR \$FE73

Mod 04 Toolkit autostart

Detail: This mod automatically loads any BASIC Toolkit located in the E2 socket on the Tanex. Without this the user needs to issue the following command (either directly or as the first line of the program):

```
POKE34,0:POKE35,232:P=USR(P)
```

Note: If the Microtan system is a disk-based system, it is preferable to load any BASIC toolkit as part of the disk program to load BASIC rather than using this modification. This is because with some toolkits it is critical when it is loaded in the initialisation sequence.

Mod 04a Toolkit starting with \$4C

Source: [MMM](#) page 3

Address	Mod 0 code		Mod 4a code	
E0C9	20BAC9	JSR \$C9BA	20F3E7	JSR \$E7F3
E7F3	FFFFFF		20BAC9	JSR \$C9BA
E7F6	FFFFFF		AD00E8	LDA \$E800
E7F9	FFFF		C94C	CMP #\$4C
E7FB	FFFF		F003	BEQ \$E800
E7FD	FF		60	RTS

Mod 04b Toolkit starting with \$4C or \$A2

Source: [TUG News 30](#) page 14

Address	Mod 0 code		Mod 4b code	
E0C9	20BAC9	JSR \$C9BA	20EAE7	JSR \$E7EA
E7EA	FFFFFF		AD00E8	LDA \$E800
E7ED	FFFF		C94C	CMP #\$4C
E7EF	FFFF		F007	BEQ \$E800
E7E1	FFFF		C9A2	CMP #\$A2
E7E3	FFFF		F003	BEQ \$E800
E7E5	FFFFFF		4CBAC9	JMP \$C9BA
E7E8	FFFFFF		2000E8	JSR \$E800
E7EB	FFFFFF		4CBAC9	JMP \$C9BA

Note: Mod 04b is not compatible with Mod 03 – it uses same locations