

\$40	( read_n / write )	ID \$08 ID \$D4	MSX2+ FS-A1 SERIES* 1CHIPMSX	w/ Z80B 5.37MHz w/ OCM-PLD Pack v2.4
\$41	( read_n / write )	BIT 0	Smart Commands	Get \$FF if Not Found
		BIT 1		
		BIT 2		
		BIT 3		
		BIT 4		
		BIT 5		
		BIT 6		
		BIT 7		
\$42	( read / write_n )	BIT 0	Green Turbo	Virtual DIP-SW1
		BIT 1	Display (MSB)	Virtual DIP-SW2
		BIT 2	Display (LSB)	Virtual DIP-SW3
		BIT 3	Slot-1	Virtual DIP-SW4
		BIT 4	Slot-2 (MSB)	Virtual DIP-SW5
		BIT 5	Slot-2 (LSB)	Virtual DIP-SW6
		BIT 6	Current Mapper	Virtual DIP-SW7
		BIT 7	Current MegaSD	Virtual DIP-SW8
\$43	( read / write_n )	BIT 0	Lock Mask of Toggles**	Turbo
		BIT 1		Display
		BIT 2		Audio Mixer & CMT
		BIT 3		Slot-1
		BIT 4		Slot-2
		BIT 5		Hard Reset
		BIT 6		Mapper
		BIT 7		MegaSD
\$44	( read / write_n )	BIT 0	Lights Mode I/O	Green Led 1
		BIT 1		Green Led 2
		BIT 2		Green Led 3
		BIT 3		Green Led 4
		BIT 4		Green Led 5
		BIT 5		Green Led 6
		BIT 6		Green Led 7
		BIT 7		Green Led 8
\$45	( read / write_n )	BIT 0	PSG Volume	BIT 0 (LSB)
		BIT 1		BIT 1
		BIT 2		BIT 2 (MSB)
	( read only )	BIT 3	PSG Mute	Status
		BIT 4	Master Volume	BIT 0 (LSB)
	( read / write_n )	BIT 5		BIT 1
		BIT 6		BIT 2 (MSB)
	( read only )	BIT 7	Master Mute	Status
\$46	( read / write_n )	BIT 0	OPLL Volume	BIT 0 (LSB)
		BIT 1		BIT 1
		BIT 2		BIT 2 (MSB)
	( read only )	BIT 3	OPLL Mute	Status
		BIT 4	SCC-I Volume	BIT 0 (LSB)
	( read / write_n )	BIT 5		BIT 1
		BIT 6		BIT 2 (MSB)
	( read only )	BIT 7	SCC-I Mute	Status
\$47	( read only )	BIT 0	CPU Custom Speed	BIT 0 (LSB)
		BIT 1		BIT 1
		BIT 2		BIT 2 (MSB)
		BIT 3	Turbo MegaSD (tMSD)	Status
		BIT 4	Turbo Pana Redirection (tPR)	Status
		BIT 5	VDP Speed Mode	Status
		BIT 6	Next Mapper	Status
		BIT 7	Next MegaSD	Status
\$48	( read only )	BIT 0	Red Turbo (tPANA)*	Status
		BIT 1	Keyboard Layout	Status
		BIT 2	CMT	Status
		BIT 3	Lights Mode	0=Auto, 1=ON
		BIT 4	Red Mode	Red LED Status
		BIT 5	Last Reset Flag	0=Cold, 1=Warm
		BIT 6	Reset Required Flag	Status
		BIT 7	MegaSD Blink	Status
\$49 - \$4D	( read only )	BIT 0	Free	\$FF (Null)
		BIT 1		
		BIT 2		
		BIT 3		
		BIT 4		
		BIT 5		
		BIT 6		
		BIT 7		
\$4E	( read only )	BIT 0	Green Turbo	Hard DIP-SW1
		BIT 1	Display (MSB)	Hard DIP-SW2
		BIT 2	Display (LSB)	Hard DIP-SW3
		BIT 3	Slot-1	Hard DIP-SW4
		BIT 4	Slot-2 (MSB)	Hard DIP-SW5
		BIT 5	Slot-2 (LSB)	Hard DIP-SW6
		BIT 6	Mapper	Hard DIP-SW7
		BIT 7	MegaSD	Hard DIP-SW8
\$4F	( read only )	BIT 0	Revision Number	BIT 0 (LSB)
		BIT 1		BIT 1
		BIT 2		BIT 2
		BIT 3		BIT 3
		BIT 4		BIT 4
		BIT 5		BIT 5
		BIT 6		BIT 6 (MSB)
		BIT 7	Keyboard Layout	Default Status

(\*)

Adv. to FS-A1WX, FS-A1WSX and FS-A1FX specs:  
[http://map.grauw.nl/resources/msx\\_io\\_ports.php#switch\\_io](http://map.grauw.nl/resources/msx_io_ports.php#switch_io)

SMART COMMANDS TABLE		
\$00	( 000 )	Null Command (reserved)
\$01	( 001 )	Set Turbo Pana Redirection OFF (default)
\$02	( 002 )	Set Turbo Pana Redirection ON
\$03	( 003 )	Set Standard Speed 3.58MHz
\$04	( 004 )	Set Custom Speed 4.10MHz
\$05	( 005 )	Set Custom Speed 4.48MHz
\$06	( 006 )	Set Custom Speed 4.90MHz
\$07	( 007 )	Set Custom Speed 5.39MHz
\$08	( 008 )	Set Custom Speed 6.10MHz
\$09	( 009 )	Set Custom Speed 6.96MHz
\$0A	( 010 )	Set Custom Speed 8.06MHz (default) (originally called 10MHz)
\$0B	( 011 )	Set Turbo MegaSD OFF
\$0C	( 012 )	Set Turbo MegaSD ON (default)
\$0D	( 013 )	Set External Slot-1 + External Slot-2
\$0E	( 014 )	Set Internal SCC-I Slot-1 + External Slot-2
\$0F	( 015 )	Set External Slot-1 + Internal SCC-I Slot-2
\$10	( 016 )	Set Internal SCC-I Slot-1 + Internal SCC-I Slot-2
\$11	( 017 )	Set External Slot-1 + Internal ASCII-8K Slot-2
\$12	( 018 )	Set Internal SCC-I Slot-1 + Internal ASCII-8K Slot-2
\$13	( 019 )	Set External Slot-1 + Internal ASCII-16K Slot-2
\$14	( 020 )	Set Internal SCC-I Slot-1 + Internal ASCII-16K Slot-2
\$15	( 021 )	Set Japanese Keyboard Layout
\$16	( 022 )	Set Non-Japanese Keyboard Layout
\$17	( 023 )	Set Display Mode to 15KHz Composite / S-Video
\$18	( 024 )	Set Display Mode to 15KHz RGB w/ Audio (Mono)
\$19	( 025 )	Set Display Mode to 31KHz VGA
\$1A	( 026 )	Set Display Mode to 31KHz VGA w/ High Luminance
\$1B	( 027 )	Set VDP Speed to Normal Mode (default)
\$1C	( 028 )	Set VDP Speed to Fast Mode
\$1D	( 029 )	Preset MegaSD OFF for next Warm Reset
\$1E	( 030 )	Preset MegaSD ON for next Warm Reset
\$1F	( 031 )	Set MegaSD Blink OFF
\$20	( 032 )	Set MegaSD Blink ON (default)
\$21	( 033 )	Set Lights Mode OFF w/ Auto LEDs Control (default)
\$22	( 034 )	Set Lights Mode ON + Red Led OFF
\$23	( 035 )	Set Lights Mode ON + Red Led ON
\$24	( 036 )	Set Audio Mute on PSG, SCC-I and OPLL
\$25	( 037 )	Set Original Audio Settings on PSG, SCC-I and OPLL
\$26	( 038 )	Set Audio at Max Volume on PSG, SCC-I and OPLL (default)
\$27	( 039 )	Set CMT OFF (default)
\$28	( 040 )	Set CMT ON
\$29	( 041 )	Lock Turbo Toggles
\$2A	( 042 )	Unlock Turbo Toggles
\$2B	( 043 )	Lock Display Toggles
\$2C	( 044 )	Unlock Display Toggles
\$2D	( 045 )	Lock Audio Mixer & CMT Toggles
\$2E	( 046 )	Unlock Audio Mixer & CMT Toggles
\$2F	( 047 )	Lock Slot-1 Toggles
\$30	( 048 )	Unlock Slot-1 Toggles
\$31	( 049 )	Lock Slot-2 Toggles
\$32	( 050 )	Unlock Slot-2 Toggles
\$33	( 051 )	Lock Slot-1 & Slot-2 Toggles
\$34	( 052 )	Unlock Slot-1 & Slot-2 Toggles
\$35	( 053 )	Lock Hard Reset Key
\$36	( 054 )	Unlock Hard Reset Key
\$37	( 055 )	Lock Mapper Toggle
\$38	( 056 )	Unlock Mapper Toggle
\$39	( 057 )	Lock MegaSD Toggle
\$3A	( 058 )	Unlock MegaSD Toggle
\$3B	( 059 )	Lock All Toggles
\$3C	( 060 )	Unlock All Toggles (default)
...	...	...
...	...	...
...	...	...
\$80	( 128 )	Null Command (useful for programming)
...	...	...
...	...	...
\$D3	( 211 )	Restore Keyboard to Default Layout
\$D4	( 212 )	Null Command (reserved)
\$D5	( 213 )	Restore Turbo to Default Setting
...	...	...
...	...	...
...	...	...
...	...	...
\$FA	( 250 )	Restore Last Reset Flag to Cold Reset Status
\$FB	( 251 )	Cold Reset (= Hard Reset)
\$FC	( 252 )	Warm Reset w/ Mapper 2048KB
\$FD	( 253 )	Warm Reset
\$FE	( 254 )	Warm Reset w/ Mapper 4096KB
\$FF	( 255 )	Restore all Default Settings + Preset Mapper & MegaSD to Default
R / W	( read / write )	0 = OFF 1 = ON Positive Logic
	( read_n / write_n )	0 = ON 1 = OFF Negative Logic
(**)	Turbo	[F12] [SHIFT+PGUP/PGDOWN] [DIP-SW1]
	Display	[PRNSCR] [SHIFT+PRNSCR] [DIP-SW2] [DIP-SW3]
	Audio Mixer & CMT	[F9/F10/F11] [SHIFT+F9/F10/F11] [PGUP/PGDOWN] [SCRLCK]
	Slot-1	[SHIFT+F12] [DIP-SW4]
	Slot-2	[SHIFT+SCRLCK] [DIP-SW5] [DIP-SW6]
	Hard Reset	[HARD RESET KEY]
	Mapper	[DIP-SW7]
	MegaSD	[DIP-SW8]