SPECIFICATIONS

OF

NETMEDIA KEYBOARD

SCORPIUS 980TP / 980TPM PLUS

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QTRONIX®

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WARNING

Note : This equipment has been tested and found to comply with the limits for a Class B device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and , if not installed and used in accordance with the instructions, may cause harmful interference to radio communications however , there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on , the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver in connected.
- Consult the dealer or an experienced radio / TV technician for technician for help.

Notice:

Changes or modifications not expressly approved by the part responsible for compliance could void the user' s authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operaton is Subject to the following two conditions : (1) this device may not cause Harmful interference, and (2) this device must accept any interference Received, including interference that may cause undesired operaton.

¢ SCOPE

The purpose of this specification is to define the generic operational, Environmental, electrical and mechanical characteristics of the " **Scorpius 980TP / 980TPM** " rubber mechanical keyswitch keyboard.

¢ GENERAL

Description

The Scorpius 980TP / 980TPM keyboard has an enhanced slim design and can work with any IBM PC AT & PS/2 compatible computer.

Utilizing the latest in rubber mechanical key switch technology, the Scorpius 980TP / 980TPM plus offers durability and style that will enhance any system for years to come. 23 Extra rubber buttons let keyboard link more closer with PC, touch one button to make some functions work immediately. 10 of 23 buttons can be programmed by end-users. 3 ACPI Keys added for easy using under Windows 98.

The trackball is 400 dot per inch (DPI) or 0.015 mm/count opto-mechanical mouse A built in micro processor, Uses multiple rotary optical encoders and a rubber coated ball to detect Mouse movements . count signals are sent to the host computer where They are translated into motion of the display screen cursor. Multiple Interface protocols are provided as follows.

Trackball with three Buttons

A powerful 3-button Trackball built-in for convenient operation.

Features

- Easily “plug and play” and compatible with IBM PC which supports PS/2 ports and Com Port
- Featuring with 20 hot key to quickly access Internet browser and multimedia applications
- 10 of the 20 hot keys are programmable which can be re-defined by user’s command after installing the included software
- Multimedia functions support five DVD players: ATI, Creative, Realmagic, Win DVD and Power DVD
- Support three Windows® 98 ACPI keys
- Built-in trackball with scroll-in-mouse program activate Scrolling and Zoom functions
- Sleek style with detachable ergonomic wrist pad
- Adjustable tilt mechanism.
- High quality rubber membrane key switches.
- Permanently attached coiled cord.
- Tactile key stroke.
- N-key –roll- over.
- 20,000,000 lift cycles per switch.

Appearance / Durability

This keyboard is to be used in home and office environments. Therefore, the quality of appearance and touch are of great importance. Because of the environmental severity of home and office place, longevity, durability and resistance to contamination are also of major concern. Good engineering design practices shall be followed throughout, both mechanically and electrically.

Package Contents

S-980TP
- Keyboard (with 2 PS/2 ports)
- Wrist-support attachment
- CD-ROM driver (for software installation)
- User Manual

S-980TPM
- Keyboard (Y –cable with 2 PS/2 ports ; a Serial-adapter)
- Wrist-Support attachment
- CD-ROM driver (for software installation)
- User,s Manual

Definitions

The term “keyboard” when used in this document defines a PC board with 104 /105 /109 key switches, 3 ACPI keys and 20 rubber buttons for Scorpius 980TP / 980TPM which is fully assembled and housed in an enclosure with an interconnecting cable. The complete assembly shall be tested and ready for use when plugged into a host device.

ENVIRONMENTAL SPECIFICATIONS

Temperature

Operating

The operating temperature range shall be from 0 to 50 (32°F to 122 °F). There shall be An operational temperature test of a single cycle, ambient, cold, hot, ambient, With a minimum of a 15 minute dwell (pause) for every 15 increment of change. The rate of temperature change shall not exceed 20 per hour. The keyboard will operate normally throughout the cycle requiring no operator Intervention or corrective actions, except to cause normal movement.

Non-Operating

The non-operating temperature range shall be from-10 to 60 (14°F to 140 °F). There Shall be a thermal shock test of five(5) cycles from-15 to 55 holding for 30 minutes at each extreme. The rate of temperature change shall not exceed 25 per hour. Normal keyboard operation will be verified before and after the thermal shock text.

Humidity

Operating

The operating relative humidity range shall be from10% to 85% non condensing ambient temperature.

Non-Operating

The non-operating relative humidity range shall be from 10% to 95% non- Condensing. The keyboard shall withstand an environment varying between 25 and 55 95% relative humidity, non condensing, for a period of 96 hours.

Vibration Test *(Packaged for shipment)*

Operating

With the system installed on a shock platform and operating the test software, a vibration with a displacement of 0.02” shall be exerted over the frequency range of 5 Hz to 22 Hz and an acceleration of 0.5 g over the frequency range of 22 Hz to 500 Hz on each of the three orthogonal axes. This shall be sustained for approximately 13 minutes per axis only.

Non-operating

With the system installed on a vibration platform and switched OFF, a vibration with a displacement of 0.1” shall be exerted over the frequency range of 5 Hz to 22 Hz and an acceleration of 0.75 g over the frequency range of 22 Hz on each of the three orthogonal axes. This test shall be sustained for approximately 13 minutes per axis.

Shock Test

Operating

With the system installed on a shock platform and operating the test software, a shock pulse of 5 G half sine for a duration of 15 ms shall be exerted on each of the 3 orthogonal axes. The test shall be repeated 3 times for the vertical axes only.

Non-operating

With the system installed on a shock platform and switched OFF , a pulse of 10 G half sine for a duration of 15 ms shall be exerted on each of the 3 orthogonal axes. The test shall be repeated 5 time.

Drop Test

- Drop Height: 91.5cm
- Sequence : 1 corner, 3 edges, 6 faces

Related Documents

The keyboard shell meet the requirements of FCC Part 15, Sub-part J, for Class B computing devices

ESD

- Test Condition : 3.5KV no data loss, 5kv no component damage
- Test Procedure : IEC 801-2

Contaminants

Dust

The keyboard has been designed to be unaffected by the normal accumulation of airborne dust as found in the home or office place. This includes non-metallic dust and grime as might be carried into the work place or home from outside sources.

Gases

The keyboard shall not be corroded or defaced or otherwise damaged by atmospheres acceptable to OSHA standards for the home and work place. This includes normal amounts of oxygen and ozone.

¢ MECHANICAL SPECIFICATIONS

Materials

General

- keyboard Bases, Cover and Keytop :
- Injection molded ABS Thermoplastic rates UL 94HB or better.
- PC Board : Paper Phonemic. Rated UL-94V0.

Trackball

Interconnect Cable

- Jacket : Low durometer PVC, 2.5mm to ± 4.1mm nominal diameter.
- Shield : Serve shield with 90% ± 5% coverage Ferrite coil.
- Conductor Insulation : PVC, Polypropylene or Teflon.
- Pull test : Cable shall be permanently secured to the keyboard housing and connector shell. Both shall withstand a 3kg force applied parallel to cord entry plane for ten (10) seconds

Standard Connector (5 Pin DIN or 6 Pin DIN)

- Connector Shell : Shielded, plastic plated , with metallic contact dimples.
- Insulator: Thermoplastic
- Contacts :Tin flash plated with a minimum of 15 micro-inches in contact area.
- Flex and Strain Relief: PVC.
- Backshell :Molded PVC.

Key Switch

Keyboard

- Type: Tactile feeling rubber membrane.
- Membrane Key Travel: 3.5 mm±0.2mm
- Contact Bounce : Switch shall have electronically debounced contact time of 5 ms (max)
- Operation Force : 55g + 10 g
- Mechanical Life : 20million cycles

Trackball

- Type: Momentary with tactile and audible feedback.
- Contact configuration : SPST
- Pretravel : 0.25mm – 1.3mm
- Hysteresis : 0.04 – 0.18mm
- Contact Bounce**:** Switch shall have electronically debounced contact time of 5 ms (max)
- Operation Force : 28 - 114gm
- Mechanical Life : One million cycles at 3 cycles / second with a vertical actuation force of 114gm

Weight

The weight shall be 1kg

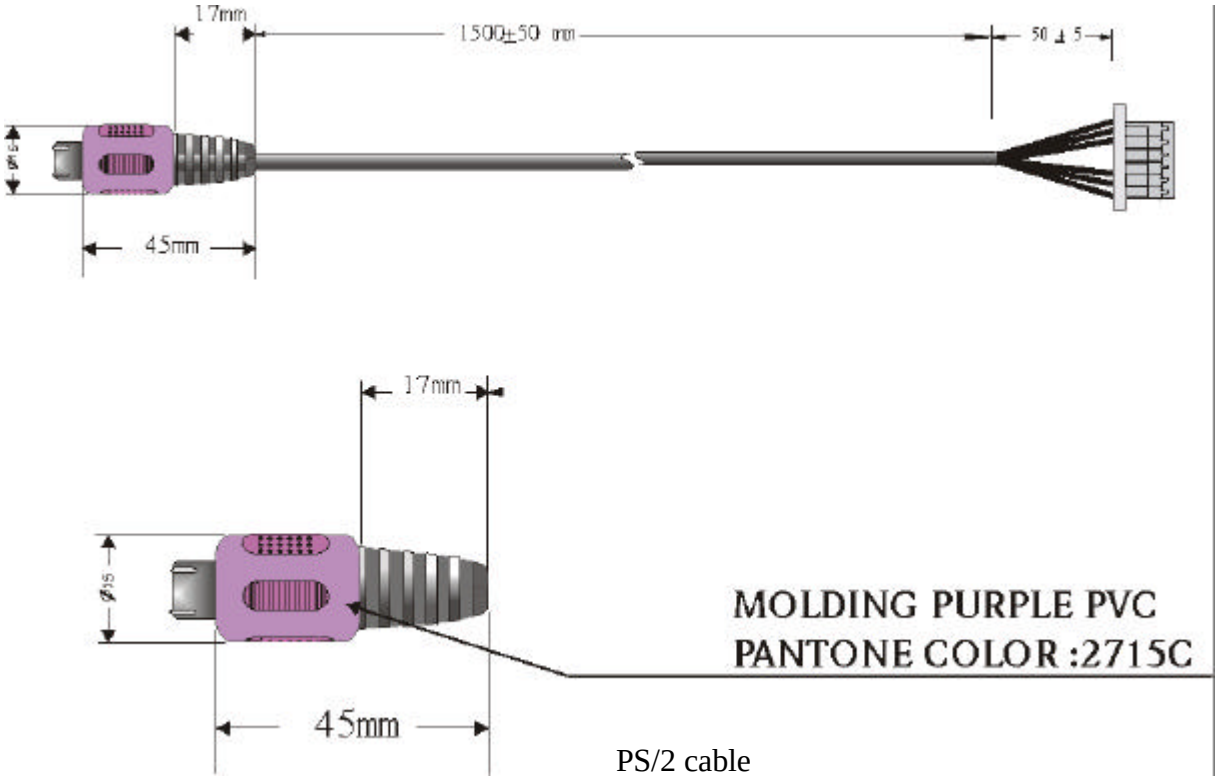
Standard Colors

White (Color No : 3361)

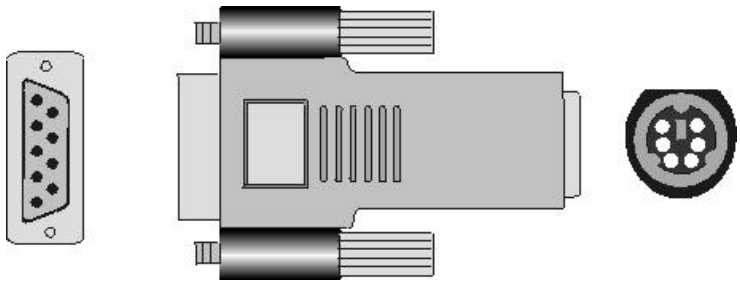
Dimensions

The maximum dimensions of the keyboard enclosure will not exceed 475mm in length , 172mm in width and 32mm in height.

Cable Specification



PS/2 cable



Adaptor

¢ ELECTRICAL SPECIFICATIONS

Components

All component will be of the highest commercial grade and shall be mounted according to IPC and recommended vendor practices. Standard values are to be adhered to at all times . Single sources, unusual values or designs outside specified component ratings shall be avoided.

PC Boards

PC Board shall be made of UL (Underwriters Laboratories) rated material, 94V-0 or better as per UL 478.

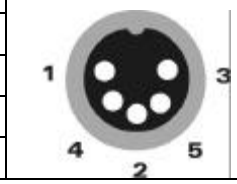
Design Practice.

All components shall perform well within their design ratings. Good IC design with respect to unused inputs and number of outputs shall be observed. Trace width and spacing shall be conservative wherever possible and shall meet IPC minimums at all times. Bypass capacitors shall be used liberally and some on-board filtering is expected when possible . Power consumption shall be minimized.

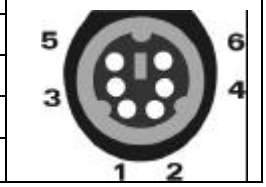
Connector Pin Assignments

The standard connector pin out for XT/AT and PS/2 is as follows :

XT or AT

DESCRIPTION	SIGNAL	PINS	CONNECTOR
Keyboard Clock	+5Vdc Signal	1	
Keyboard Date	+5Vdc Signal	2	
NC	NC	3	
Ground	GND	4	
Power Supply	+5Vdc	5	

PS-2

DESCRIPTION	SIGNAL	PINS	CONNECTOR
Keyboard Clock	+5Vdc Signal	1	
Keyboard Date	+5Vdc Signal	2	
NC	NC	3	
Ground	Clock	4	
Power Supply	+5Vdc	5	

Power Requirements

- Current Consumption : 20mA
- Operation Voltage : 5Vdc ± 5%

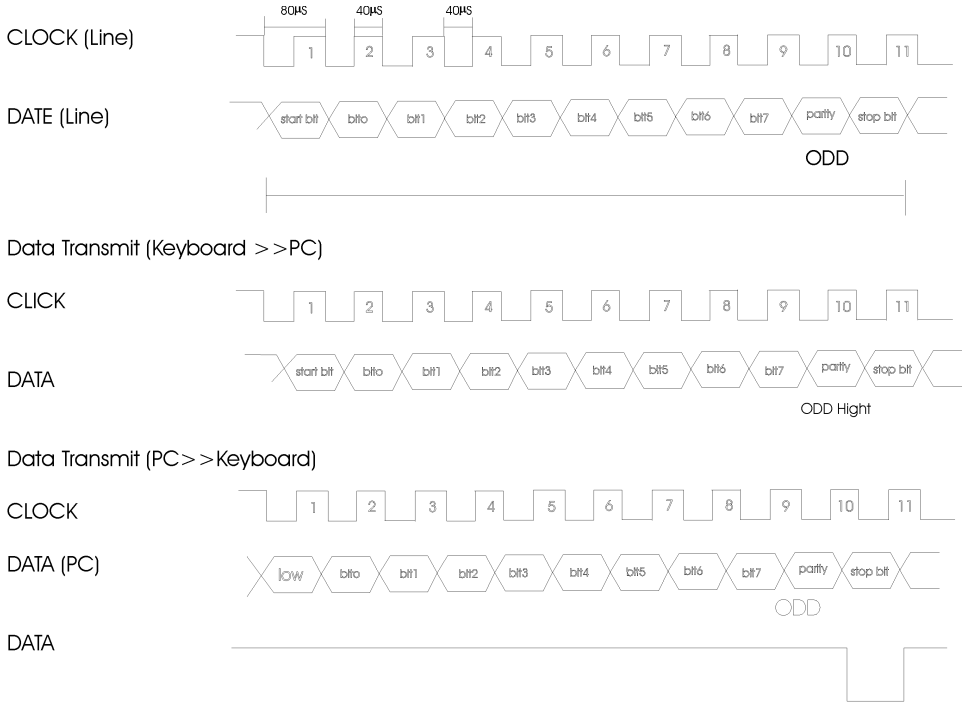
Rubber / Membrane

- Rubber Dome Contact Resister : 100Ω (max)
- Membrane Contact Resister : 100Ω [
- Membrane Open Resister 10MΩ [

Interface

- Fully IBM PC AT/PS-2 compatible
- Serial data transfer
- Timing detail:

Transmission	***Clock***	***Data***
Transmission inhibit	Low	High
System to send	High	Low
Keyboard to send	High	High



¢ ¾CODE SET TABLE

Key Number	Scan Code Set1		Scan Code Set2	
	Make Code	Break Code	Make Code	Break Code
`(~)	29	A9	OE	F0 OE
1	02	82	16	F0 16
2	03	B3	1E	F0 1E
3	04	84	26	F0 26
4	05	85	25	F0 25
5	06	86	2E	F0 2E
6	07	87	36	F0 36
7	08	88	3D	F0 3D
8	09	89	3E	F0 3E
9	0A	8A	46	F0 46
0	0B	8B	45	F0 45
-(-)	0C	8C	4E	F0 4E
=(+)	0D	8D	55	F0 55
BACK SPACE	0E	8E	66	F0 66
TAB	0F	8F	0D	F0 0D
Q	10	90	15	F0 15
W	11	91	1D	F0 1D
E	12	92	24	F0 24
R	13	93	2D	F0 2D
T	14	94	2C	F0 2C
Y	15	95	35	F0 35
U	16	96	3C	F0 3C
I	17	97	43	F0 43
O	18	98	44	F0 44
P	19	99	4D	F0 4D
[({)	1A	9A	54	F0 54
]{})	1B	9B	5B	F0 5B
\(¦)@1	2B	AB	5D	F0 5D
CAPS	3A	BA	5B	F0 58
A	1E	9E	1C	F0 1C
S	1F	9F	1B	F0 1B
D	20	A0	23	F0 23
F	21	A1	2B	F0 2B
G	22	A2	34	F0 34
H	23	A3	33	F0 33
J	24	A4	3B	F0 3B
K	25	A5	42	F0 42
L	26	A6	4B	F0 48
;(:)	27	A7	4C	F0 4C
'(")	28	A8	52	F0 52
K42 @2	2B	AB	5D	F0 5D
ENTER	1C	9C	5A	F0 5A
SHIFT_L	2A	AA	12	F0 12
K45 @2	56	D6	61	F0 61
Z	2C	AC	1A	F0 1A
X	2D	AD	22	F0 22
C	2E	AE	21	F0 21
V	2F	AF	2A	F0 2A
B	30	B0	32	F0 32
N	31	B1	31	F0 31
M	32	B2	3A	F0 3A
,(<)	33	B3	41	F0 41
.(>)	34	B4	49	F0 49
/(?)	35	B5	4A	F0 4A
SHIFT R	36	B6	59	F0 59
CTRL L	1D	9D	14	F0 14
ALT L	36	B8	11	F0 11
SPACE	39	B9	29	F0 29
ALT_R	E0 38	E0 B8	E0 11	E0 F0 11
CTRL_R	E0 1D	E0 9D	E0 14	E0 D0 14
NUM	45	C5	77	F0 77
(7)	47	C7	6C	F0 6C
(4)	4B	CB	6B	F0 6B
(1)	4F	CF	69	F0 69
(8)	48	C8	75	F0 75
(5)	4C	CC	73	F0 73
(2)	50	D0	72	F0 72
(è)	52	D0	70	F0 70
(*)	37	87	7C	F0 7C
(9)	49	C9	7D	F0 7D
(6)	4D	CD	74	F0 74
(3)	51	D1	7A	F0 7A
(DEL)	53	D3	71	F0 71
(-)	4A	CA	7B	F0 78
(+)	4E	CE	79	F0 79
(ENTER)	E0 1C	E0 9C	E0 5A	E0 F0 5A
ESC	01	81	76	F0 76

Key Number	Scan Code set 1		
	Base Case Shift Num Lick Make / Break	Shift Case Make / Break	Num Lick On Make / Break
INS	EO 52/EO D2	EO AA EO 52 / EO D2 EO 2A	EO 2A 52 / EO D2 EO AA
DEL	EO 53 /E3 D3	EO AA EO 53 /EO D3 EO 2A	E0 2A E0 53/ EO D3 EO AA
LEFT	EO 4B / EO CB	EO AA EO 4B / EO CB EO 2A	EO 2A EO 4B / EO CB EO AA
HOME	EO 47 / EO C7	EO AA EO 47 / EO C7 EO 2A	EO 2A EO 47 / EO C7 EO AA
END	EO 4F / EO CF	EO AA EO 4F / EO CF EO 2A	EO 2A EO 4F / EO CF EO AA
UP	EO 48 / EO C8	EO AA EO 48 / EO CB EO 2A	EO 2A EO 48 / EO CB EO AA
DOWN	EO 50 / EO DO	EO AA EO 50 / EO CO EO 2A	EO 2A EO 50 / EO DO EO AA
PAGE UP	EO 49 / EO C9	EO AA EO 49 / EO C9 EO 2A	EO 2A EO 49 / EO C9 EO AA
PAGE DOWN	E0 51 / EO D1	EO AA E0 51 / E C1 EO 2A	EO 2A E0 51 / EO D1 EO AA
RIGHT	EO 4D / EO CD	EO AA EO 4D / EO CD E0 2A	EO 2A EO 4D / EO CD EO AA
* If the left shift key is key is held down. The AA / 2A shift make and break is sent with the other scan codes . if the night shift key is held down , B6 / 36 is sent , If both shift keys are down, both sets of codes are sent with the other scan code			

Scan code Set1		
Key No	Make / break Code	Shift Case make / Break
(/)	EO 35 / EO B	EO AA EC 35/EO B5 EO 2A
* if the left shift key is held down , the AA / 2A shift make and break is sent with the other scan codes . If the right shift key is held down , B3 /36 is sent. If both shift keys are down , both sets of codes are sent with the other scan code.		

Scan code Set1			
Key No	Make / break Code	Ctrl ,Shift Case Make / Break	Alt Case Make / Break
PRINT	EO 2A EO 37 / EO B7 EO AA	EO 37 / EO B7	54 / D4

Scan code Set1		
Key No	Make Code	Ctrl Key Pressed
PAUSE @4	E1 1D 45 E1 9D C5	EO 46 EO C6

Key Number	Scan Code Set1		Scan Code Set2	
	Make Code	Break Code	Make Code	Break Code
F2	3C	BC	06	F0 06
F3	3D	BD	04	F0 04
F4	3E	BE	0C	F0 0C
F5	3F	BF	03	F0 03
F6	40	C0	0B	F0 0B
F7	41	C1	83	F0 83
F8	42	C2	0A	F0 0A
F9	43	C3	01	F0 01
F10	44	C4	09	F0 09
F11	57	D7	78	F0 78
F12	58	D8	07	F0 07
SCROLL	46	C6	7E	F0 7E

Key Number	Scan code Set2		
	Base Case shift+Num Lock Make / break	Shift Case Make / break	Num Lock On make / Break
INS	E0 70 / E0 F0 70	E0 F0 12 E0 70 / E0 F0 70 E0 12	E0 12 E0 70 / E0 F0 70 E0 F0 12
DEL	EO 71 /E0 F0 71	E0 F0 12 E0 71 / E0 F0 71 E0 12	E0 12 E0 71 / E0 F0 71E0 F0 12
LEFT	E0 68 / E0 F06B	E0 F0 12 E06B / E0 F06B E0 12	E0 12 E06B /E0F06B E0 F0 12
HOME	E0 6C / E0 F0 6C	E0F0 12 E0 6C / E0 F0 6C E0 12	E0 12 E0 6C / E0 F0 6C E0 F0 12
END	E0 69 / E0 F0 69	E0 F0 12 E0 69 /E0 F0 69 E0 12	E0 12 E0 69 /E0 F0 69 E0 F0 12
UP	E0 75 / E0 F0 75	E0 F0 12 E0 75 /E0 F0 75 E0 12	E0 12 E075 / E0 F0 75 E0 F012
DOWN	E0 72 / E0 F0 72	E0 F0 12 E0 72 /E0 F0 72 E012	E0 12 E0 72 / E0 F0 72 E0 F0 12
PAGE UP	E0 7D / E0 F07D	E0F012E0 7D /E0 F0 7D E0 12	E012 E0 7D / 7 E0 F0 D E0 F012
PAGE DOWN	E 0 7A / E0 F0 7A	E0 F0 12 E0 7A /E0 F0 7A E012	E0 12 E0 7A /E0 F0 7A E0 F0 12
RIGHT	E0 74 / E0 F0 74	E0 F0 12 E0 74 /E0 F0 74 E0 12	E0 12 E0 74 / E0 F0 74 E0 F0 12
If the left shift key is held down . the F0 12 /12 Shift make and break is sent with the other scan codes . if the right shift key is held down. F0 59 / 59 is sent. If both shift keys are down. Both sets of codes are sent with the other scan code			

Scan code Set2		
Key No	Make / break code	Shift case Make / Break
(/)	EO 4A / E0 F0 4A	E0 F0 12 4A / E0 12 F0 4A
*If the left shift key is held down. The AA/ 2A shift make and break is sent with the other scan codes If the right shift key is held down, B6 /36 is sent. If both Shift keys are down. Both sets of codes are sent with the other scan code		

Scan code Set2			
Key No	Make / break Code	Ctrl, Shift Case Make / break	All case Make / break
PRINT	EO 12 E0 7C / E0 7C E0 F0 12	E0 7C / E0 F0 7C	84 / F0 84

Scan code Set2		
Key No	Make Code	Ctrl Key Pressed
PAUSE @8	E1 14 77 E1 F0 14 F0 77	E0 7E / E0 F0 7E

Scan code 3			
T=Typematic , M/B =make / Break M=Make only			
D	23	F0 23	T
F	2B	F0 2B	T
G	34	F0 34	T
H	33	F0 33	T
J	3B	F0 3B	T
K	42	F042	T
L	4B	F0 4B	T
;(:)	4C	F0 4C	T
'(")	52	F0 52	T
K42 @10	53	F0 5D	T
ENTER	5A	F0 5A	T
SHIFT_L	12	F0 12	M/B
K45 @10	13	F013	T
Z	1A	F0 1A	T
X	22	F0 22	T
C	21	F0 21	T
V	2A	F0 2A	T
B	32	F0 32	T
N	31	F0 31	T
M	3A	F03A	T
,(<)	41	F0 41	T
.(>)	49	F0 49	T
/(?)	4A	F0 4A	T
SHIFT_R	59	F0 59	M/B
CTRL_L	11	F0 11	M/B
ALT_L	19	F0 19	M/B
SPACE	29	F0 29	T
ALT_R	39	E0 39	M
CTRL_R	58	E058	M
INS	67	F067	M
DEL	64	F0 64	T
LEFT	61	F0 61	T
HOME	6E	F0 6E	M
END	65	F0 65	M
UP	63	F063	T
DOWN	60	F060	T
PAGE UP	6F	F0 6F	M
PAGE DOWN	6D	F0 6D	M
RIGHT	6A	F0 6A	T
NUM	76	F0 76	M
(7)	6C	F0 6C	M
(4)	6B	F0 6B	M
(1)	69	F0 69	M
(/)	77	F0 77	M
(8)	75	F0 75	M
(5)	73	F0 73	M
(2)	72	F0 72	M
(0)	70	F0 70	M
(*)	7E	F0 7E	M
(9)	7D	F0 7D	M
(6)	74	F0 74	M
(3)	7A	F07A	M
(DEL)	71	F0 71	M
(-)	84	F0 84	M
(+)	7C	F0 7C	T
(ENTER)	79	E0 79	M
ESC	08	F0 08	M
F1	07	F0 07	M
F2	OF	F0 0F	M
F3	17	F0 17	M
F4	1F	F0 1F	M
F5	27	F0 27	M
F6	2F	F0 2F	M
F7	37	F0 37	M
F8	3F	F0 3F	M
F9	47	F047	M
F10	4F	F0 4F	M
F11	56	F0 56	M
F12	5E	F0 5E	M
PRINT	57	F0 57	M
SCROLL	5F	F0 5F	M
PAUSE	62	F0 62	M

New key codes for scan set 1:

New key	Make	Break
LWIN	E0 5B	E0 DB
RWIN	E0 5C	E0 DC
APP	E0 5D	E0 DD
N-CHG(131)	7B	FB
GHG(132)	79	F9
ROMA(133)	70	F0
K14	7D	FD
K56	73	F3
K107	7E	FE
KL	F1	X
KR	F0	X
POWER	E0 5E	E0 DE
SLEEP	E0 5F	F0 DF
WAKE UP	E0 63	E0 E3

New key codes for scan set 2:

New key	Make	Break
LWIN	E0 1F	E0 F0 1F
RWIN	E0 27	E0 F0 27
APP	E0 2F	E0 F0 2F
N-CHG(131)	67	F0 67
GHG(132)	64	F0 64
ROMA(133)	13	F0 13
K14	6A	F0 6A
K56	51	F0 51
K107	6D	F0 6D
KL	F1	X
KR	F2	X
POWER	E0 37	E0 F0 37
SLEEP	E0 3F	E0 F0 3F
WAKE UP	E0 5E	E0 F0 5E

New key codes for scan set 3:

New key	Make	Break	
LWIN	8B	F0 8B	MAKE/BREAK
RWIN	8C	F0 8C	MAKE/BREAK
APP	8D	F0 8D	MAKE/BREAK
N-CHG(131)	85	F0 85	MAKE
GHG(132)	86	F0 86	MAKE
ROMA(133)	87	F0 87	MAKE
K14	5D	F0 5D	TYPEMATIC
K56	51	F0 51	TYPEMATIC
K107	7B	F0 7B	TYPEMATIC
KL	F1	X	
KR	F2	X	
POWER	X	X	
SLEEP	X	X	
WAKE UP	X	X	

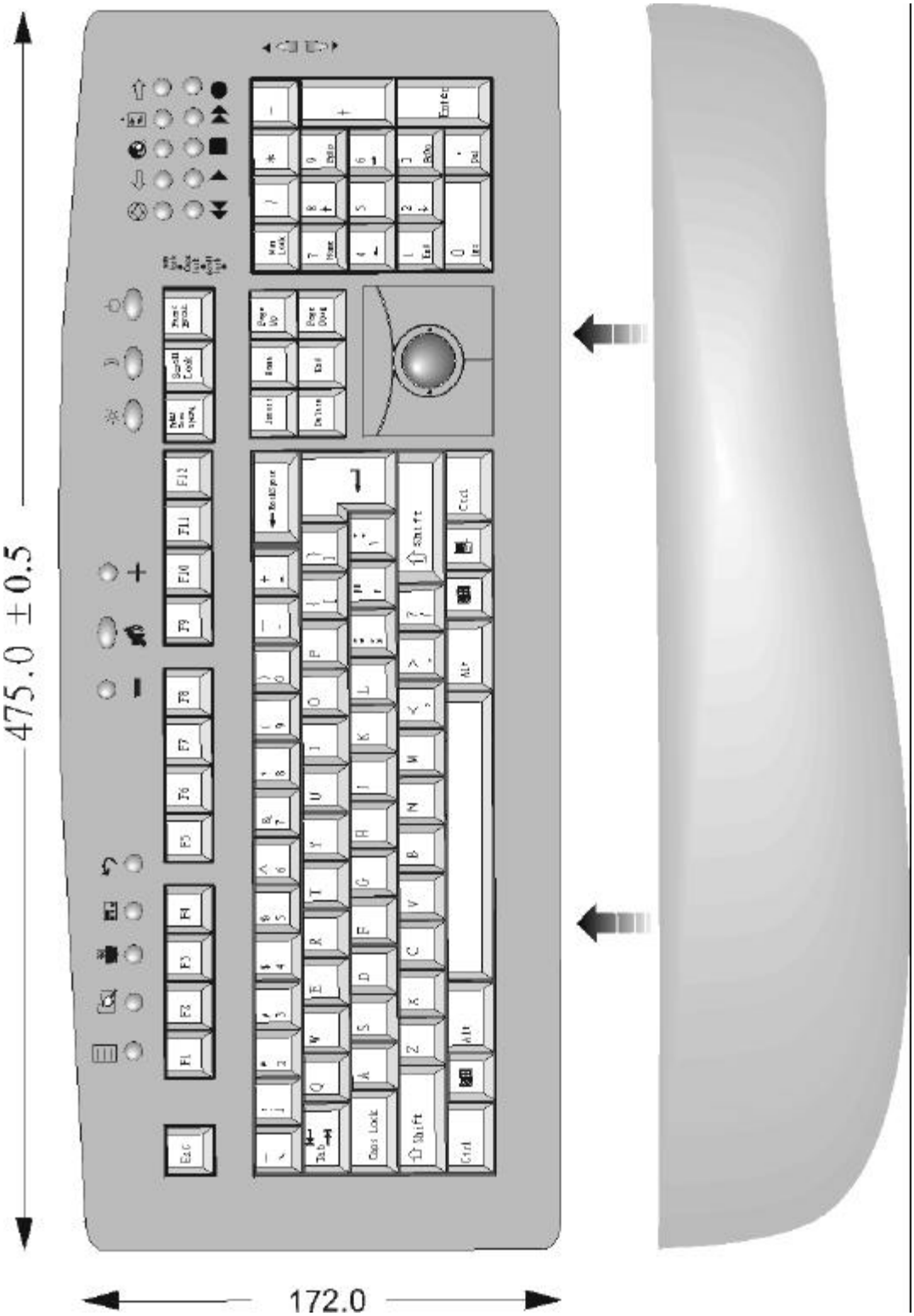
		SET1		SET2		SET3			
Hot key function		Make code	Break code	Make code	Break code	Make code	Break code		
Play / Pause	F1 M-1	E0 22	E0 A2	E0 34	E0 F0 34	93	F0 93	M/B	No Type
Stop Eject	F2 M-2	E0 24	E0 A4	E0 38	E0 F0 3B	94	F0 94	M/B	No Type
Rewind	F3 M-5	E0 21	E0 A1	E0 2B	E0 F0 2B	99	F0 99	M/B	No Type
Forward	F4 M-8	E0 23	E0 A3	F0 33	E0 F0 33	9A	F0 9A	M/B	No Type
Record	F5 M-6	E0 30	E0 B0	E0 32	E0 F0 32	91	F0 91	M/B	No Type
V+	F6 M-7	E0 2E	E0 AE	E0 21	E0 F0 23	92	F0 92	M/B	Typematic
V-	F7 M-3	E0 20	E0 A0	E0 23	E0 F0 23	9B	F0 9B	M/B	No Type
Mute	F8 M-4	E0 26	E0 A6	E0 4B	E0 F0 4B	9C	F0 9C	M/B	No Type
WWW	F9 1-1	E0 25	E0 A5	E0 42	E0 F0 42	9D	F0 9D	M/B	No Type
Previous Page	F10-14	E0 1E	E0 92	E0 1C	E0 F0 1C	95	F0 95	M/B	No Type
Next Page	F11 1-5	E0 12	E0 92	E0 24	E0 F0 24	96	F0 96	M/B	No Type
STOP	F12 1-2	E0 32	E0 B2	E0 3A	E0 F0 3A	97	F0 97	M/B	No Type
Search	F13 1-3	E0 17	E0 97	E0 43	E0 F0 43	98	F0 98	M/B	No Type
Scroll up	F14 P-1	E0 19	E0 99	E0 4D	E0 F0 4D	A0	F0 A0	M/B	Typematic
Scroll Down	F15 O-4	E0 10	E0 90	E0 15	E0 F0 15	A1	F0A1	M/B	Typematic
Coffee	F16 0-5	E0 31	R0 B1	E0 31	E0 F0 31	9E	F0 9E	M/B	No Type
Suspend	F17 O-3	E0 18	E0 98	E0 44	E0 F0 44	9F	F0 9E	M/B	No Type
Calculator	F18 S-1	E0 68	E0 E8	E0 28	E0 F0 28	8E	F0 8E	M/B	No Type
Xfer	F19 O-1	E0 1F	E0 9F	E0 1B	E0 F0 1B	A3	F0 A3	M/B	No Type
Menu	F20 O-2	E0 13	E0 93	E0 2D	E0 F0 2D	A2	F0 A2	M/B	No Type

Multimedia function

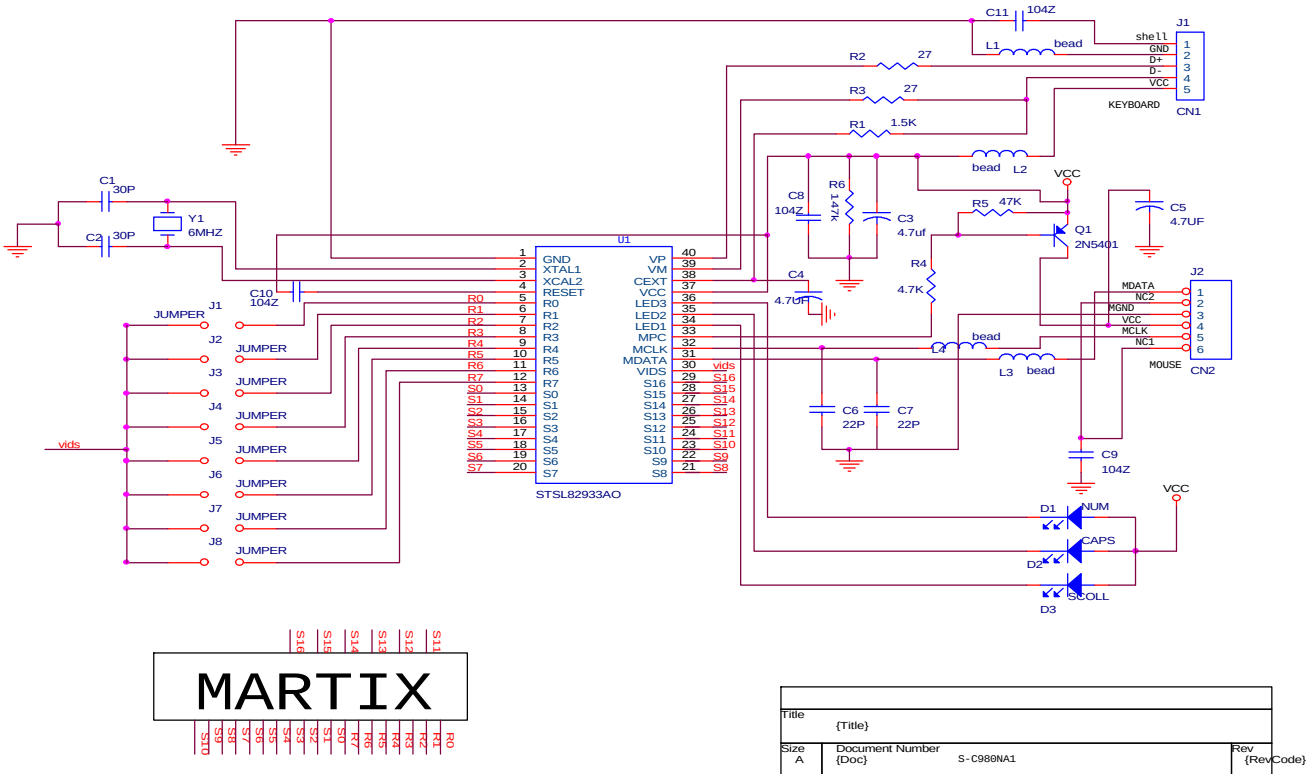
	Menu	activates the user-interface and allows users to configure 10 programmable Hot Keys to perform specific functions
	Explorer	open Windows program files
	Coffee Break	enters screen saver mode
	Calculator	brings out Calculator
	X'fer	transfer the amount of Calculator to worksheet.
	Vol up	volume increase
	Mute	volume mute
	Vol down	volume decrease
	Wake up	turn system on from sleep mode
	Sleep	turn system to Sleep mode
	Power	power off the whole system
	WWW	launches the Internet browser
	Back	back to the last page on Internet browser
	SRCH	search specific web site
	Refresh	refresh web site
	FWR	forward to the next page on Internet browser
	Rewind	instructs the CD / VCD / DVD player to the previous track
	Play/Pause	begin or pause the CD / VCD / DVD playing
	Stop	stops the current playing
	Forward	instructs the CD/VCD / DVD player to the next track
	Record	record resource from assigned source
	Scroll Up	scrolling work sheet or browser up.
	Scroll Down	scrolling work sheet or browser down.

23 hot keys

¢ £LANGUAGE LAYOUT



¢ ÀSCHEMATIC


C11 104Z
L1 bead
J1
shell
GND
D+
D-
VCC
KEYBOARD
CN1
R2 27
R3 27
R1 1.5K
bead L2
VCC
C1 30P
C2 30P
Y1 6MHZ
C10 104Z
C8 104Z
R6 1.47K
C3 4.7uf
R5 47K
Q1 2N5401
C5 4.7UF
C4 4.7uF
R4 4.7K
J2
MDATA
NC2
MGND
VCC
MCLK
NC1
MOUSE
CN2
L4 bead
L3 bead
C6 22P
C7 22P
C9 104Z
U1
GND
XTAL1
XCAL2
RESET
R0
R1
R2
R3
R4
R5
R6
R7
S0
S1
S2
S3
S4
S5
S6
S7
VP
VM
CEXT
VCC
LED3
LED2
LED1
MPC
MCLK
MDATA
VIDS
S16
S15
S14
S13
S12
S11
S10
S9
S8
STSL82933AO
J1 JUMPER
J2 JUMPER
J3 JUMPER
J4 JUMPER
J5 JUMPER
J6 JUMPER
J7 JUMPER
J8 JUMPER
vids
D1 NUM
D2 CAPS
D3 SCOLL
VCC
MARTIX
Title
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Size A
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S-C980NA1
Rev {RevCode}