

Dragon Graphics Chip Sets

TFS2-33-01

DESCRIPTION

The Dragon Graphics Chip Sets have been optimized to drive flat-panel and CRT displays for laptop and notebook applications. Set I supports up to 16 shades of gray on LCD's and PDP's (plasma display panels). Set II supports 64 shades of gray on LCD's. Set III supports 64 colors on multi-color LCD's. All three sets are fully compatible with software written for the IBM® VGA, EGA, CGA, MDA/Hercules graphic standards, and can support up to 256 colors on a color CRT.

The Dragon Graphics Chip Sets support high resolution graphics and alphanumeric display modes for monochrome, color, variable frequency and PS/2 monitors. Video outputs are provided for digital and analog monitors.

Evaluation/Demonstration Board	Available Chip Sets	Application Engineering Support
Assembled and fully tested graphic adapter board	Set I	Sales technical support
Schematic of evaluation/demo board	SPC8000FoB, SPC8010FoA, and SEA6461J35	Design assistance/OEM and application support
Parts list	Drives CRT monitors and grayscale LCD or PDP (16 shades)	Application notes/technical bulletins
Installation guide		BIOS and utility software documentation
Cabling and power supply terminals		Application program driver software
Software	Set II	Consultant referral
Demonstration disk	SPC8000FoB, SPC8011FoA, and SEA6461J35	Software and installation guides
BIOS on EPROM or floppy	Drives CRT monitors and grayscale LCD (64 shades)	FCC certification coordination
		License agreements for BIOS
	Set III	
	SPC8000FoB, SPC8030FoA, and SEA6462J35	
	Drives CRT monitors and color LCD (64 colors)	

FEATURES

- Video support VGA, EGA CGA, and MDA/Hercules
- Gray scale/color 16/64 shades (monochrome flat-panel), or 64 color
- Flat-panel support Color/monochrome
- Flat-panel sizes 640 x 480, 720 x 480
- Monitor support Analog and digital
- Built-in interfaces PC AT/XT and microchannel bus
- Easily upgradable from monochrome to color design
- DRAM support 256k: 64 x 4 1 MB: 256 x 4
- Concurrently selectable fonts 8
- High resolution VGA modes 640 x 400 & 640 x 480, 256 colors
- High resolution EGA modes 640 x 480 & 800 x 600, 16 colors
- Automode switching
- CGA (mode 13) VRAM pages 16 (256 colors)
- Internal coding of BIOS ROM

● Dragon Flat-Panel VGA Chip Set (Grayscale)

Logic supply voltage: $V_{DD}=5\pm 5\%(V)$

Type No	Characteristics	Package
SPC8000F08	MFGC (Multi-Function Graphic Controller) Compatible with software for VGA, EGA, CGA, MDA/Hercules Enhanced modes (in VGA, EGA) Supports BIOS	144-PIN QFP
SEA6461J35	VPMF (Video color Palette for Monochrome Flat-panel) RAMDAC, Simultaneous display of 256 colors from 262, 144 colors on CRT 35MHz pipeline operation 6-bit digital output	44-pin PLCC
SPC8010FOA	VMFI (Video/Monochrome Flat-panel Interface) Panel resolutions: 640 x 480, 720 x 480 dots Gray-shade: 16FRM Gray-shade and 64 PWM Gray-shade Supports LCD and PD panels	44-pin QFP
SPC8011FOA	VMFI (Video/Monochrome Flat-panel Interface) Panel resolutions 640 x 480, 720 x 480 Gray-shade: 64FRM Supports LCD panels Use in place of SPC8010 for additional grayscales	44-pin QFP

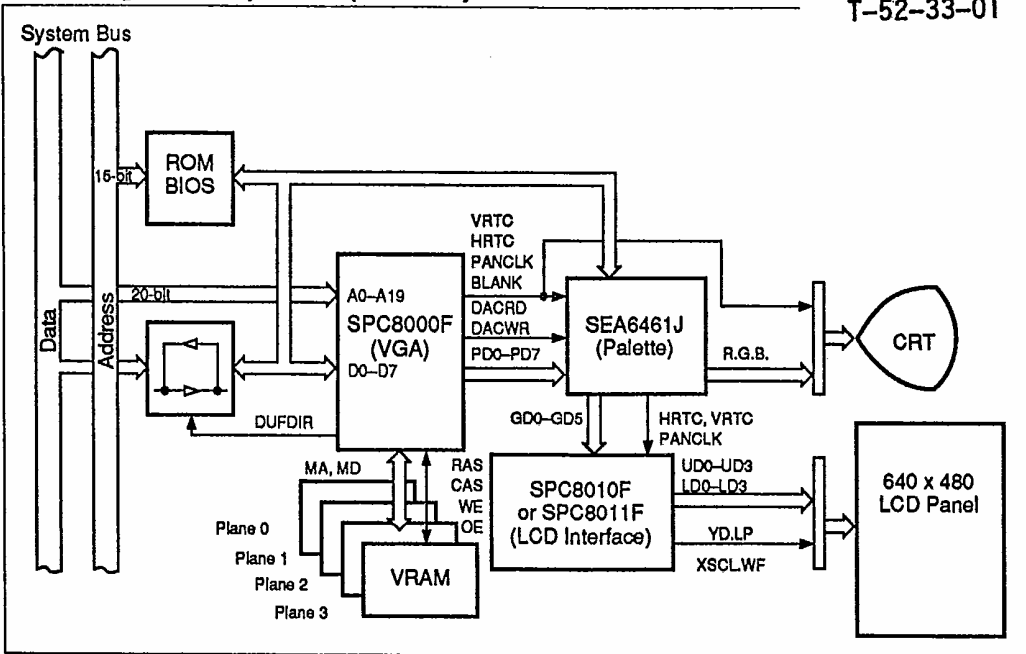
● Dragon Flat-panel VGA Chip Set (Color)

Logic supply voltage: $V_{DD} = 5\pm 5\%(V)$

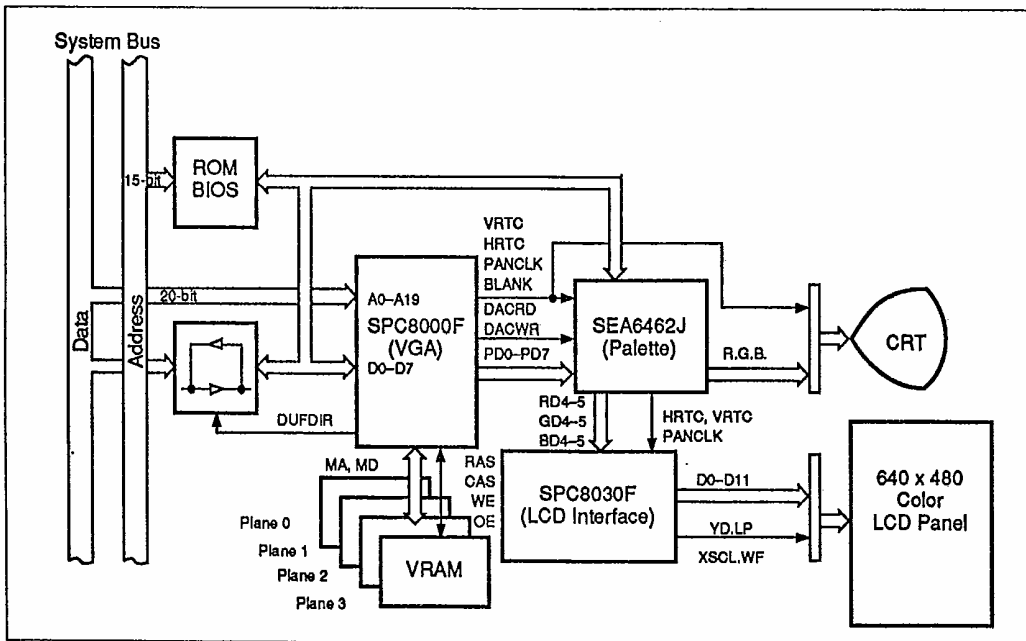
Type No.	Characteristics	Package
SPC8000F08	MFGC (Multi-Function Graphic Controller) Compatible with software for VGA, EGA, CGA, MDA/Hercules Enhanced mode (in VGA, EGA) Supports BIOS	144-pin QFP
SPC8030FOA	VCFI (Video/Color Flat-panel Interface) Panel resolutions: can be made compatible with any panel or resolution 320 x 200 through 800 x 600 Colors: 64FRM Supports LCD and PD panels	44-pin QFP
SEA6462J35	VPCF (Video Color Palette for Color Flat-panel) RAMDAC, Simultaneous display of 512 colors from 262, 144 colors on CRT 35MHz pipeline operation 6-bit digital color data output (2 bits red, 2 bits green, 2 bits blue)	44-pin PLCC

● Block Diagram for Grayscale Graphics Subsystem

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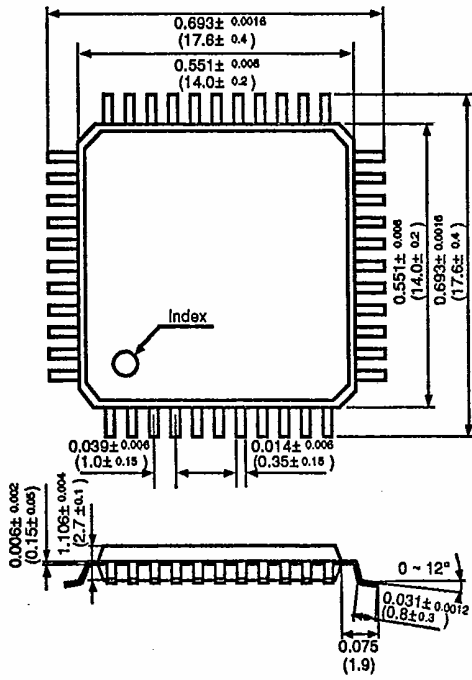
● Block Diagram for Color Graphics Subsystem



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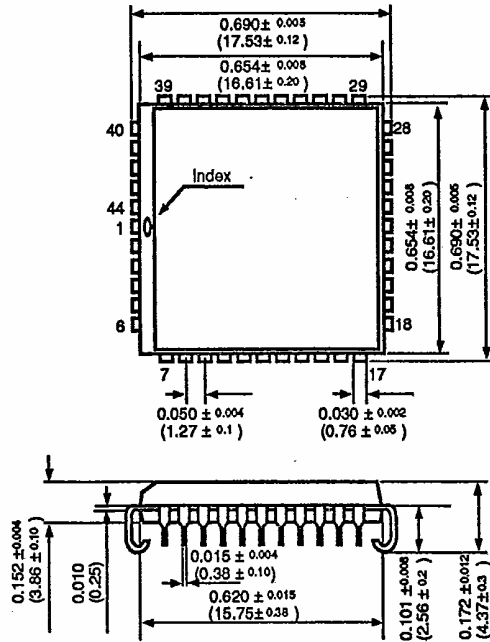
SPC8010FoA
 SPC8011FoA
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44-pin QFP



SEA6461J35
 SEA6462J35

44-pin PLCC



SPC8000FoA

144-pin QFP

