

BLOCK DIAGRAM	<table border="1"> <tr><td>16/8K ROM</td></tr> <tr><td>4K CHAR ROM</td></tr> <tr><td>Z8 CPU</td></tr> <tr><td>RAM</td></tr> <tr><td>OSD</td></tr> <tr><td>13 TIMER</td></tr> <tr><td>PWM WDT PORTS</td></tr> </table>	16/8K ROM	4K CHAR ROM	Z8 CPU	RAM	OSD	13 TIMER	PWM WDT PORTS	<table border="1"> <tr><td>6K ROM</td></tr> <tr><td>3K CHAR ROM</td></tr> <tr><td>Z8 CPU</td></tr> <tr><td>RAM</td></tr> <tr><td>OSD</td></tr> <tr><td>7 TIMER</td></tr> <tr><td>PWM WDT PORTS</td></tr> </table>	6K ROM	3K CHAR ROM	Z8 CPU	RAM	OSD	7 TIMER	PWM WDT PORTS	<table border="1"> <tr><td>CHAR ROM</td></tr> <tr><td>COMMAND INTERPRETER</td></tr> <tr><td>ANALOG SYNC/DATA SLICER</td></tr> <tr><td>OSD CTRL</td></tr> </table>	CHAR ROM	COMMAND INTERPRETER	ANALOG SYNC/DATA SLICER	OSD CTRL	<table border="1"> <tr><td>1K/6K ROM</td></tr> <tr><td>Z8 CPU</td></tr> <tr><td>WDT</td></tr> <tr><td>124 RAM</td></tr> <tr><td>P2</td></tr> <tr><td>P3</td></tr> </table>	1K/6K ROM	Z8 CPU	WDT	124 RAM	P2	P3	<table border="1"> <tr><td>2K/8K/16K ROM</td></tr> <tr><td>Z8 CPU</td></tr> <tr><td>WDT</td></tr> <tr><td>128 256, 768 RAM</td></tr> <tr><td>P0</td></tr> <tr><td>P1</td></tr> <tr><td>P2</td></tr> <tr><td>P3</td></tr> </table>	2K/8K/16K ROM	Z8 CPU	WDT	128 256, 768 RAM	P0	P1	P2	P3
16/8K ROM																																					
4K CHAR ROM																																					
Z8 CPU																																					
RAM																																					
OSD																																					
13 TIMER																																					
PWM WDT PORTS																																					
6K ROM																																					
3K CHAR ROM																																					
Z8 CPU																																					
RAM																																					
OSD																																					
7 TIMER																																					
PWM WDT PORTS																																					
CHAR ROM																																					
COMMAND INTERPRETER																																					
ANALOG SYNC/DATA SLICER																																					
OSD CTRL																																					
1K/6K ROM																																					
Z8 CPU																																					
WDT																																					
124 RAM																																					
P2																																					
P3																																					
2K/8K/16K ROM																																					
Z8 CPU																																					
WDT																																					
128 256, 768 RAM																																					
P0																																					
P1																																					
P2																																					
P3																																					
PART NUMBER	Z86C271127/97/47E47	Z86C271127/97/47E47	Z86129/228/Z86129	Z86106/Z86129	Z86170/71/72/73/74 75/76/77/78																																
DESCRIPTION	Digital Television Controller (DTC™) Television, VCRs, and Cable Z86E47 - OTP Version	Standard DTC™ Features with Reduced ROM, RAM, PWM Outputs for Greater Economy	Z86129/228 = Line 21 Closed Caption Controller (L21C™) Z86129/228 = Line 21 Closed Caption and EDS Controller	Z86L06 = Low-Voltage CMOS Consumer Controller Processor Z86L29 = 6K Infrared Remote Controller	Zilog Infrared Remote Controllers (ZIRC™) for IR Remote/Battery Operated Applications Ranging in ROM: L70=2K, L71=8K, L72&78=16K, L73&74=32K, L75=4K, L76=12K, L77=24K																																
PROCESS/SPEED	CMOS: 4 MHz	CMOS: 4 MHz	CMOS: 12 MHz	Low-Voltage CMOS: 8 MHz	Low-Voltage CMOS: 8 MHz																																
FEATURES	<ul style="list-style-type: none"> ■ 8K/16K/OTP ROM ■ 256 Byte RAM ■ 160x7-Bit Video RAM ■ On-Screen Display ■ (OSD) Video Controller Programmable <ul style="list-style-type: none"> - Color - Position Attributes - Size - Position Attributes ■ 13 PWMs for D/A Conversion ■ 128-Character Set ■ 4Kx6-Bit Char. Gen. ROM ■ Watch-Dog Timer (WDT) ■ Low-Voltage Protection ■ Five Ports/36 Pins ■ Two Standby Modes ■ Low-EMI Mode 	<ul style="list-style-type: none"> ■ 6K ROM, 256 Byte RAM ■ 120x7-Bit Video RAM ■ OSD On-Board Programmable <ul style="list-style-type: none"> - Color - Size - Position Attributes ■ 7 PWMs ■ 96-Character Set ■ 3Kx6-Bit Char. Gen. ROM ■ Watch-Dog Timer (WDT) ■ Low-Voltage Protection ■ Three Ports/20 Pins ■ Two Standby Modes ■ Low-EMI Mode 	<ul style="list-style-type: none"> ■ Conforms to FCC Line 21 Format ■ Parallel or Serial Modes ■ Stand-Alone Operation ■ On-Board Data Sync and Slicer ■ On-Board Character Generator <ul style="list-style-type: none"> - Color - Blinking - Italic - Underline - Extended Data Services 	<ul style="list-style-type: none"> ■ 1K ROM and 6K ROM ■ Watch-Dog Timer (WDT) ■ Two Analog Comparators with Output Option ■ Two Standby Modes ■ Two Counter/Timers ■ Auto Power-On Reset ■ 2V Operation ■ RC Oscillator Option ■ Low-Noise Option ■ Low-Voltage Protection ■ High-Current Drivers (2, 4) 	<ul style="list-style-type: none"> ■ Watch-Dog Timer (WDT) ■ Two Analog Comparators with Output Option ■ Two Standby Modes <ul style="list-style-type: none"> - Auto Pulse Reception/Generation - Auto Power-On Reset ■ 2V Operation ■ RC Oscillator Option ■ Low-Voltage Protection ■ High-Current Drivers ■ Three OTP Versions Available <ul style="list-style-type: none"> - Z86E72/73/74 																																
PACKAGE	64-Pin DIP	40-Pin DIP	18-Pin DIP	18-Pin DIP 18-Pin SOIC	786L71=20-Pin DIP/SOIC 786L70/L75=18-Pin DIP, SOIC 786L72/L76/L77=40, 44-Pin DIP, PLCC, QFP 786L74=64/68-Pin																																
SUPPORT PRODUCTS	Z86C2700ZCO - Evaluation Board Z86C2700ZDB - Emulator Z86C2700ZEM - Emulator	Z86C2700ZCO - Evaluation Board Z86C2700ZEM - Emulator Z86C2700ZDB - Emulator	Support Documentation Provided with the device	Z86C-5000ZEM - Emulator	786L7200TSC - Emulator 786L7100ZEM - Emulator 786L7100ZDB - Emulator																																

