

	TV Controller			IR Controller			Cable TV																																																																																						
Block Diagram	<table border="1"> <tr><td colspan="3">8K ROM</td></tr> <tr><td colspan="3">4K CHAR ROM</td></tr> <tr><td>Z8 CPU</td><td colspan="2">RAM</td></tr> <tr><td colspan="3">OSD</td></tr> <tr><td>13 PWM</td><td>TIMER WDT</td><td>5 PORTS</td></tr> </table>	8K ROM			4K CHAR ROM			Z8 CPU	RAM		OSD			13 PWM	TIMER WDT	5 PORTS	<table border="1"> <tr><td colspan="3">6K ROM</td></tr> <tr><td colspan="3">3K CHAR ROM</td></tr> <tr><td>Z8 CPU</td><td colspan="2">RAM</td></tr> <tr><td colspan="3">OSD</td></tr> <tr><td>7 PWM</td><td>TIMER WDT</td><td>3 PORTS</td></tr> </table>	6K ROM			3K CHAR ROM			Z8 CPU	RAM		OSD			7 PWM	TIMER WDT	3 PORTS	<table border="1"> <tr><td colspan="2">CHAR ROM</td></tr> <tr><td colspan="2">COMMAND INTERPRETER</td></tr> <tr><td colspan="2">ANALOG SYNC/DATA SLICER</td></tr> <tr><td colspan="2">OSD CTRL</td></tr> </table>	CHAR ROM		COMMAND INTERPRETER		ANALOG SYNC/DATA SLICER		OSD CTRL		<table border="1"> <tr><td colspan="2">1K/6K ROM</td></tr> <tr><td colspan="2">Z8 CPU</td></tr> <tr><td>WDT</td><td>124 RAM</td></tr> <tr><td>P2</td><td>P3</td></tr> </table>	1K/6K ROM		Z8 CPU		WDT	124 RAM	P2	P3	<table border="1"> <tr><td colspan="4">2K/8K/16K ROM</td></tr> <tr><td colspan="4">Z8 CPU</td></tr> <tr><td>WDT</td><td colspan="3">128,256,768 RAM</td></tr> <tr><td>P0</td><td>P1</td><td>P2</td><td>P3</td></tr> </table>	2K/8K/16K ROM				Z8 CPU				WDT	128,256,768 RAM			P0	P1	P2	P3	<table border="1"> <tr><td colspan="3">4K ROM</td></tr> <tr><td colspan="3">CPU</td></tr> <tr><td>WDT</td><td>236 RAM</td><td>P1</td></tr> <tr><td>P2</td><td>P3</td><td>P0</td></tr> </table>	4K ROM			CPU			WDT	236 RAM	P1	P2	P3	P0	<table border="1"> <tr><td>16K ROM</td><td colspan="2">UART</td></tr> <tr><td>CPU</td><td colspan="2">236 RAM</td></tr> <tr><td>P0</td><td>P1</td><td>P2</td></tr> <tr><td>P3</td><td>P4</td><td>P5 P6</td></tr> </table>	16K ROM	UART		CPU	236 RAM		P0	P1	P2	P3	P4	P5 P6
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Part #	Z86C27/127/C97	Z86227	Z86128	Z86L06/L29	Z86L70/71/72 (Q193)	Z86C40/E40	Z86C61/62																																																																																						
Description	Z8® Digital Television Controller MCU with logic functions needed for Television Controller, VCRs and Cable	Standard DTC features with reduced ROM, RAM, PWM outputs for greater economy	Line 21 Controller (L21C™) for Closed Caption Television	18-pin Z8® Consumer Controller Processor (CCP™) low-voltage and low-current battery operation 1K-6K ROM	Z8® (CCP™) low-voltage parts that have more ROM, RAM and special Counter/Timers for automated output drive capabilities	Z8® Consumer Controller Processor (CCP™) with 4K ROM (C40) E40 = OTP version	Z8® MCU Expanded I/O's and 16K ROM																																																																																						
Process/Speed	CMOS 4 MHz	CMOS 4 MHz	CMOS 12 MHz	Low Voltage CMOS 8 MHz	Low Voltage CMOS 8 MHz	CMOS 12 MHz	CMOS 16, 20 MHz																																																																																						
Features	Z8/DTC Architecture 8K ROM, 256-byte RAM 160x7-bit video RAM On-Screen Display (OSD) video controller Programmable color, size, position attributes 13 PWMs for D/A conversion 128-character set 4Kx6-bit char. Gen. ROM Watch-Dog Timer (WDT) Brown-Out Protection 5 Ports/36 pins 2 Standby Modes Low EMI Mode	Z8/DTC Architecture 6K ROM, 256-byte RAM 120x7-bit video RAM OSD on board Programmable color, size, position attributes 7 PWMs 96-character set 3Kx6-bit character generator ROM Watch-Dog Timer (WDT) Brown-Out Protection 3 Ports/20 pins 2 Standby Modes Low EMI Mode	Conforms to FCC Line 21 format Parallel or serial modes Stand-alone operation On-board data sync and slicer On-board character generator - Color - Blinking - Italic - Underline	Z8® Architecture 1K ROM & 6K ROM Watch-Dog Timer 2 Analog Comparators with output option 2 Standby Modes 2 Counter/Timers Auto Power-On Reset 2 volt operation RC OSC option Low Noise option Brown-Out Protection High current drivers (2, 4)	Z8® Architecture 2K/8K/16K ROM Watch-Dog Timer 2 Analog Comparators with output option 2 Standby Modes 2 Enhanced Counter/Timers, Auto Pulse Reception/Generation Auto Power-On Reset 2 volt operation RC OSC option Brown-Out Protection High current drivers (4)	4K ROM, 236 RAM 2 Standby Modes 2 Counter/Timers ROM Protect RAM Protect 4 Ports Brown-Out Protection 2 Analog Comparators Low EMI Watch-Dog Timer Auto Power-On Reset Low Power option	16K ROM Full duplex UART 2 Standby Modes (STOP and HALT) 2 Counter/Timers ROM Protect option RAM Protect option Pin compatible to Z86C21 C61 = 4 Ports C62 = 7 Ports																																																																																						
Package	64-pin DIP 52-pin active (127)	40-pin DIP	18-pin DIP	18-pin DIP 18-pin SOIC	20-pin DIP (L71), 18-pin DIP, SOIC (L70) 40,44-pin DIP, PLCC, QFP (L72)	40-pin DIP	40-pin DIP (C61) 44-pin PLCC, QFP (C61) 68-pin PLCC (C62)																																																																																						
Application	Low-end Television Cable/Satellite Receiver	Low-end Television Cable/Satellite Receiver	TVs, VCRs, Decoders	I.R. Controller Portable battery operations	I.R. Controller Portable battery operations	Window Control Wiper Control Sunroof Control Security Systems TAD	Cable Television Remote Control Security																																																																																						