

<p>BLOCK DIAGRAM</p>	<table border="1"> <tr><td>4K ROM</td></tr> <tr><td>GPU</td></tr> <tr><td>WDT/236 RAM</td></tr> <tr><td>P1</td></tr> <tr><td>P2</td></tr> <tr><td>P3</td></tr> <tr><td>P0</td></tr> </table>	4K ROM	GPU	WDT/236 RAM	P1	P2	P3	P0	<table border="1"> <tr><td>16K ROM</td></tr> <tr><td>CPU</td></tr> <tr><td>236 RAM</td></tr> <tr><td>P0</td></tr> <tr><td>P1</td></tr> <tr><td>P2</td></tr> <tr><td>P3</td></tr> <tr><td>P4</td></tr> <tr><td>P5</td></tr> <tr><td>P6</td></tr> </table>	16K ROM	CPU	236 RAM	P0	P1	P2	P3	P4	P5	P6	<table border="1"> <tr><td>12K/16K/24K ROM</td></tr> <tr><td>DSP CORE</td></tr> <tr><td>RAM I²C</td></tr> <tr><td>OSD CCD</td></tr> <tr><td>PWM</td></tr> <tr><td>WDT</td></tr> <tr><td>2 PORTS</td></tr> </table>	12K/16K/24K ROM	DSP CORE	RAM I ² C	OSD CCD	PWM	WDT	2 PORTS	<table border="1"> <tr><td>12K/16K/24K ROM</td></tr> <tr><td>DSP CORE</td></tr> <tr><td>RAM I²C</td></tr> <tr><td>OSD CCD</td></tr> <tr><td>PWM</td></tr> <tr><td>WDT</td></tr> <tr><td>2 PORTS</td></tr> </table>	12K/16K/24K ROM	DSP CORE	RAM I ² C	OSD CCD	PWM	WDT	2 PORTS	<table border="1"> <tr><td>32K OTP</td></tr> <tr><td>16K ROM</td></tr> <tr><td>DSP CORE</td></tr> <tr><td>RAM I²C</td></tr> <tr><td>OSD CCD</td></tr> <tr><td>PWM</td></tr> <tr><td>WDT</td></tr> <tr><td>2 PORTS</td></tr> </table>	32K OTP	16K ROM	DSP CORE	RAM I ² C	OSD CCD	PWM	WDT	2 PORTS
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<p>PART NUMBER</p>	<p>Z86C40/Z86E40</p>					<p>Z86C61/Z86C62</p>	<p>Z89300/02/04/06/14</p>	<p>Z89301/03/05/07/13</p>	<p>Z89331/Z89336</p>																																			
<p>DESCRIPTION</p>	<p>Z8[®] Consumer Controller Processor (CCP) Z86E40 = OTP Version</p>					<p>Z8[®] MCU with Expanded I/Os</p>	<p>Advanced TV Controller with Closed Caption Decoder (CCD), StarSight[™], OSD for TV, VCR, Cable, Satellite Z89301 = OTP Version</p>	<p>Advanced TV Controller with CCD StarSight[™], for TV, VCR, Cable, Satellite Z89301 = OTP Version</p>	<p>Advanced TV Controller with CCD StarSight[™], OSD for TV, VCR, Cable, Satellite Z89301 = OTP Version</p>																																			
<p>PROCESS/SPEED</p>	<p>CMOS: 12 MHz</p>					<p>CMOS: 16, 20 MHz</p>	<p>CMOS: 12 MHz</p>	<p>CMOS: 12 MHz</p>	<p>CMOS: 12 MHz</p>																																			
<p>FEATURES</p>	<ul style="list-style-type: none"> ■ 4K ROM, 236 RAM ■ Two Standby Modes ■ Two Counter/Timers ■ ROM Protect ■ RAM Protect ■ Four Ports ■ Low-Voltage Protection ■ Two Analog Comparators ■ Low-EMI Mode ■ Watch-Dog Timer (WDT) ■ Auto Power-On Reset ■ Low-Power Option 					<ul style="list-style-type: none"> ■ 16K ROM ■ Full-Duplex UART ■ Two Standby Modes (STOP and HALT) ■ Two Counter/Timers ■ RAM Protect Option ■ Pin Compatible to Z86C21 ■ Z86C61 = Four Ports ■ Z86C62 = Seven Ports 	<ul style="list-style-type: none"> ■ StarSight Capability ■ Closed-Captioning ■ DSP 12 MHz ■ 16-Bit, 512 Byte (Z89314) ■ 640 Byte RAM ■ 12K/16K/24K ROM ■ Programmable OSD ■ I²C, 7 PWM ■ 3-Channel ADC ■ Watch-Dog Timer (WDT) ■ Two Ports ■ 32 kHz, XTAL ■ Low-Power Mode ■ *Not Available on Z89314 	<ul style="list-style-type: none"> ■ StarSight Capability ■ Closed-Captioning ■ DSP 12 MHz ■ 16-Bit, 640 Byte RAM ■ 12K/16K/24K ROM ■ Programmable OSD ■ I²C, 9 PWM ■ 4-Channel ADC ■ Watch-Dog Timer (WDT) ■ Two Ports ■ 32 kHz, XTAL ■ Low-Power Mode 	<ul style="list-style-type: none"> ■ StarSight Capability ■ Closed-Captioning ■ DSP 12 MHz ■ 16-Bit, 640 Byte RAM ■ 12K/16K/24K ROM ■ Programmable OSD ■ I²C, 7 PWM ■ 5-Channel ADC ■ Watch-Dog Timer (WDT) ■ Two Ports ■ 32 kHz, XTAL ■ Low-Power Mode 																																			
<p>PACKAGE</p>	<p>40-Pin DIP 44-Pin PLCC</p>					<p>Z86C61 = 40-Pin DIP Z86C61 = 44-Pin PLCC, QFP Z86C62 = 68-Pin PLCC</p>	<p>40-Pin SDIP</p>	<p>52-Pin SDIP</p>	<p>42-Pin SDIP</p>																																			
<p>SUPPORT PRODUCTS</p>	<p>Z86C5000ZEM - Emulator Z86CCF00ZEM - Emulator Z86E400ZDP - Adaptor Kit Z86E400ZDV - Adaptor Kit</p>					<p>Z86C5000ZEM - Emulator Z86CCF00ZEM - Emulator</p>	<p>Z8930900ZEM - Emulator Z8930900TSC - Emulator Z8930901TSC - Emulator</p>	<p>Z8930900ZEM - Emulator Z8930900TSC - Emulator Z8930901TSC - Emulator</p>	<p>Z8930900ZEM - Emulator Z8930900TSC - Emulator Z8930901TSC - Emulator</p>																																			