# 9325812 UNITED MICROELECTRONICS

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### 7-52-33-09

UM6845R CRT Controller

### FEATURES

- Single +5 Volt (±5%) Power Supply.
- Alphanumeric and Limited Graphics Capabilities.
- Fully Programmable Display (Rows, Columns, Blanking, etc.).
- Interlaced or Non-interlaced Scan.
- 50/60 Hz Operation.
- Fully Programmable Cursor.
- External Light Pen Capability.
- Capable of Addressing up to 16K Character Video Display RAM.
- No DMA Required.
- Compatible with MC6845R.
- Straight-binary Addressing for Video Display RAM.

# UM6845E CRT Controller

### **FEATURES**

- Single +5 Volt (±5%) Power Supply.
- Alphanumeric and Limited Graphics Capabilities.
- Fully Programmable Display (Rows, Columns, Blanking, etc.).
- Interlaced or Non-interlaced Scan.
- 50/60 Hz Operation.
- Fully Programmable Cursor.
- External Light Pen Capability.
- Capable of Addressing up to 16K Character Video Display RAM.
- No DMA Required.
- Pin-compatible with MC6845R.
- Row/Column or Straight-binary Addressing for Video Display RAM.
- Video Display RAM May be Configured as Part of Microprocessor Memory Field or Independently Slaved to UM6845.
- Internal Status Register.
- 3.7 MHz Character Clock.
- Transparent Address Mode.

## PIN CONFIGURATION

GND	Ч	1				40	Ь	VSYNC	
RES	2	2	er, etc. Franze			39	Þ	HSYNC	
LPEN	d	3				38		RAO	
CCO/MAO	Ь	4	24	1.1		37		RA1	
CC1/MA1	d	5			$\{ e_{ij} \}_{i \in \mathbb{N}}$	36		RA2	
CC2/MA2	리	6			1	35	Þ	RA3	
CC3/MA3	ᄇ	7.		200		34	Þ	RA4/STI	3
CC4/MA4	너	8	en sen. La sua	_		33	Þ	DBO	
CC5/MA5		9		Σ.	. :	32	Þ	DB1	
CC6/MA6		10	÷.,	۶,	1.5	31	Þ	DB2	
CC7/MA7		11	÷.,	1		30	Þ.	DB3	
CR0/MA8	디	12		, mi	· .	29	Þ	DB4	
CR1/MA9	디	13		С, , ,		28	Þ	DB5	
CR2/MA10		14	14.44		111	27	P	DB6	
CR3/MA11	Ц	15			1.141	26	Þ	DB7	
CR4/MA12		16		e des		25	P	ĊŚ	
CR5/MA13		17-				24	P	RS	
PLAY ENABLE		18	jes.			23	P	E	
CURSOR	C	19				22	P	R/W	
v <sub>cc</sub>		20			12	21	P	CCLK	

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# PIN CONFIGURATION

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GND		1		$\sim$		40	Þ	VSYNC
RES		2		· · ·		39	Þ	HSYNC
LPEN		3				38	Þ	RAO
CC0/MA0		4		4		37	Þ	RA1
CC1/MA1		5				36	Þ	RA2
CC2/MA2		6	1	•	·	35	Þ	RA3
CC3/MA3		·7 ··	12	1.		34	Þ	RA4
CC4/MA4		8	<u>.</u>	. –		33	Þ	DB0
CC5/MA5		9		Š		32	Þ	DB1
CC6/MA6		10		M6845R		31	Þ	DB2
CC7/MA7		1.1	÷.	8		30	Þ	DB3
CR0/MA8		12		्रत्र		29	Þ	DB4
CR1/MA9		13		·		28	Þ	DB5
CR2/MA10		14	- 1	1.1		27	Þ	DB6
CR3/MA11		15	j <sup>1</sup> -			26	Þ	DB7
CR4/MA12		16	- <u>-</u> -			25	Þ	<u>cs</u>
CR5/MA13		17	۰.			24	Þ	RŞ ·
SPLAY ENABLE		18				23	Þ	Ē
CURSOR	E	19				22	Þ	R/₩
v <sub>cc</sub>	E	20	•		+1.5	21	Þ	CCLK
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