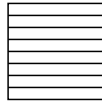
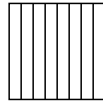


Kristall
(Stark
vergrößert)

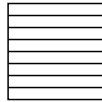


Kristall unter
Spannung (Stark
vergrößert)

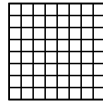


Zwei Schichten übereinander:

gleiche
Ausrichtung



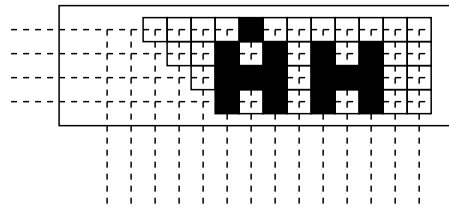
entgegengesetzte
Ausrichtung



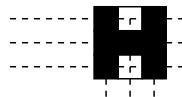
Normale grÖße:



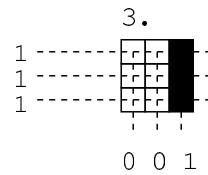
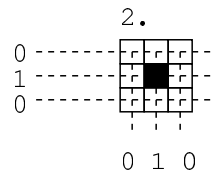
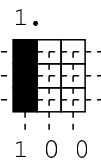
Dot Matrix



Beschaltung

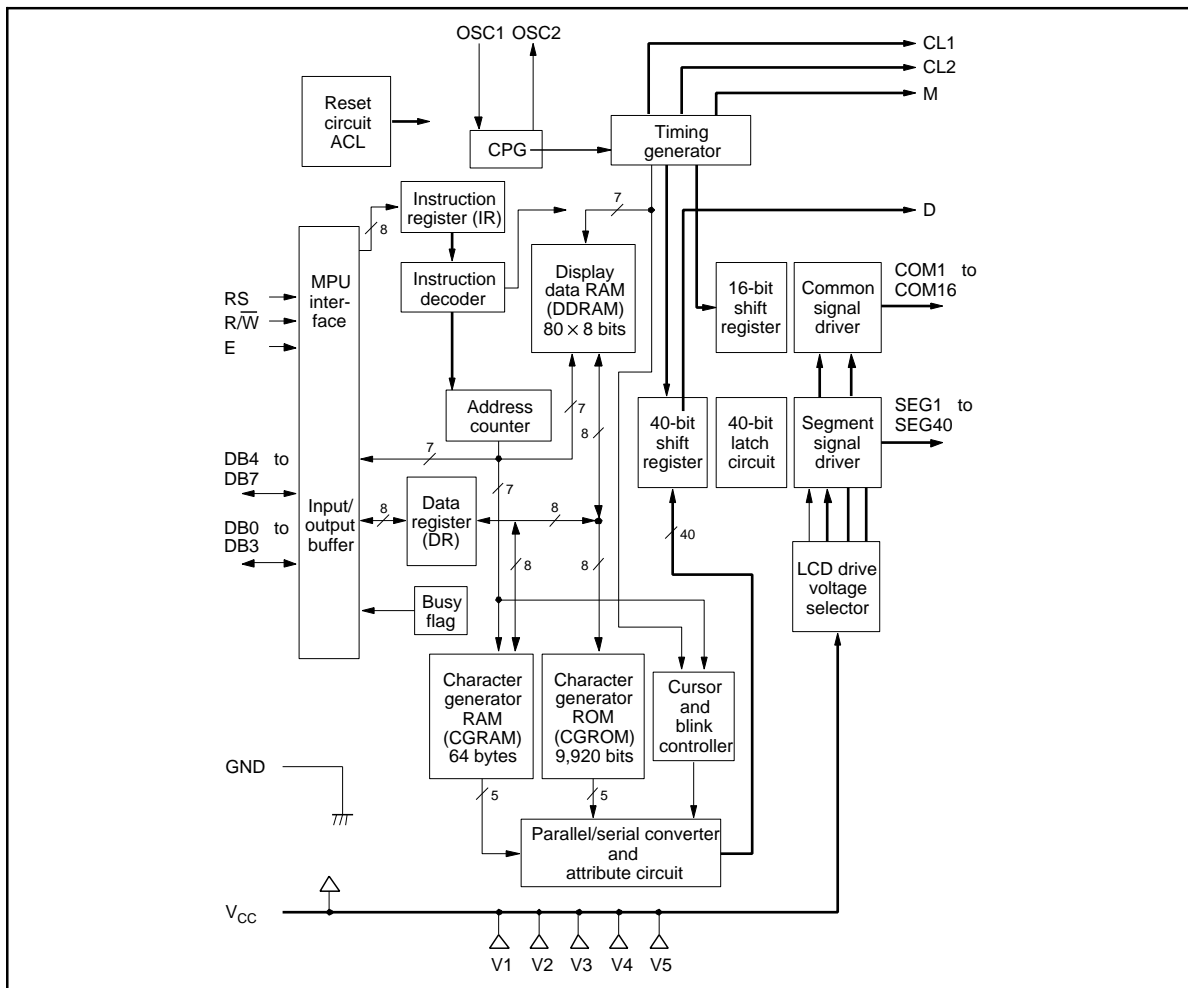


1=+ 0=0



1=- 0=0

Blockdiagramm des HD4478*



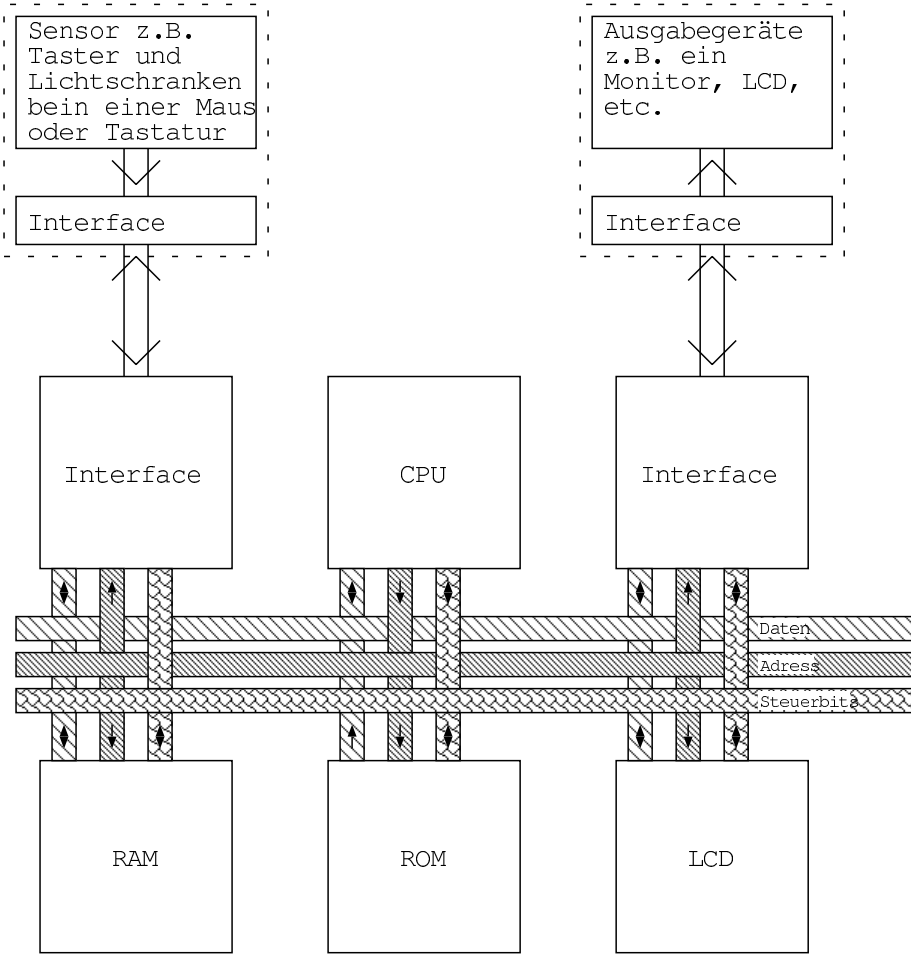
Correspondence between Character Codes and Character Patterns (ROM Code: A00)

Lower # 4 Bits	Upper # 4 Bits	0000	0001	0010	0011	0100	0101	0110	0111	1000	1001	1010	1011	1100	1101	1110	1111	
xxxx0000	CG# RAM# (1)			0	0	P	`	P					一	夕	ミ	α	p	
xxxx0001	(2)		!	1	A	Q	a	q					。	ア	チ	△	δ	q
xxxx0010	(3)		"	2	B	R	b	r					「	イ	ツ	×	ρ	θ
xxxx0011	(4)		#	3	C	S	c	s					」	ウ	テ	ε	ε	σ
xxxx0100	(5)		\$	4	D	T	d	t					、	エ	ト	†	μ	Ω
xxxx0101	(6)		%	5	E	U	e	u					・	オ	ナ	1	ε	Ü
xxxx0110	(7)		&	6	F	V	f	v					ヲ	カ	ニ	ヨ	ρ	Σ
xxxx0111	(8)		'	7	G	W	g	w					ア	キ	ヌ	ラ	g	π
xxxx1000	(1)		(	8	H	X	h	x					ィ	ク	ネ	リ	J	×
xxxx1001	(2)		)	9	I	Y	i	y					ウ	ケ	ル	ル	”	∪
xxxx1010	(3)		*	:	J	Z	j	z					エ	コ	ン	レ	j	≠
xxxx1011	(4)		+	;	K	[	k	[					オ	サ	ヒ	ロ	*	≠
xxxx1100	(5)		,	<	L	¥	l	l					カ	シ	フ	フ	φ	≠
xxxx1101	(6)		-	=	M	]m	]	m	]				ユ	ズ	ヘ	ン	≠	÷
xxxx1110	(7)		.	>	N	^n	^	n	→				ヨ	セ	ホ	”	≠	
xxxx1111	(8)		/	?	O	_o	_	o	←				ツ	ソ	マ	”	Ö	■

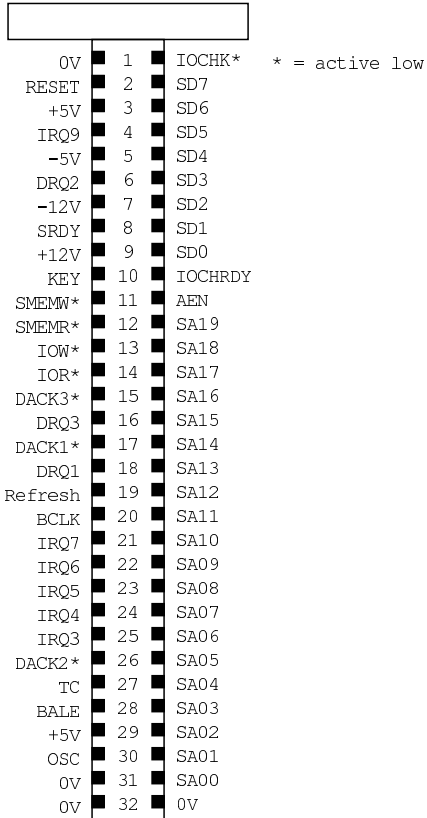
Correspondence between Character Codes and Character Patterns (ROM Code: A02)

Lower # 4 Bits	Upper # 4 Bits	0000	0001	0010	0011	0100	0101	0110	0111	1000	1001	1010	1011	1100	1101	1110	1111
xxxx0000	CG# RAM# (1)	▶	◀	0	1	P	Q	R	S	T	U	V	W	X	Y	Z	◊
xxxx0001	(2)	◀	!	1	A	Q	a	q	À	á	±	À	Ñ	ã	ñ		
xxxx0010	(3)	“	”	2	B	R	b	r	⌘	Γ	ϕ	²	À	Ò	ã	Ò	
xxxx0011	(4)	”	#	3	C	S	c	s	З	π	ℓ	³	À	Ó	ã	Ó	
xxxx0100	(5)	▲	\$	4	D	T	d	t	Н	Σ	κ	℞	À	Ô	ä	Ô	
xxxx0101	(6)	▼	%	5	E	U	e	u	Й	σ	¥	℞	À	Ö	ä	Ö	
xxxx0110	(7)	●	&	6	F	V	f	v	J	Ј	ı	9	€	Ö	ø	Ö	
xxxx0111	(8)	◀	'	7	G	W	g	w	П	τ	§	•	С	×	С	÷	
xxxx1000	(1)	↑	(	8	H	X	h	x	У	♣	♠	ω	É	Ф	é	Ф	
xxxx1001	(2)	↓	)	9	I	Y	i	y	У	⊖	⊕	¹	É	Û	é	Û	
xxxx1010	(3)	→	*	:	J	Z	j	z	Ч	Ω	≡	⊖	É	Û	é	Û	
xxxx1011	(4)	←	+	;	K	[	k	{	Ш	δ	⊗	⊗	É	Û	é	Û	
xxxx1100	(5)	≤	,	<	L	\	l	|	Щ	∞	∞	℥	İ	Û	ı	Û	
xxxx1101	(6)	≥	-	=	M	]	m	}	Ъ	♣	♠	℥	İ	ÿ	ı	ÿ	
xxxx1110	(7)	▲	.	>	N	^	n	~	Ы	ε	∂	℥	İ	İ	İ	İ	
xxxx1111	(8)	▼	/	?	O	_	o	ˆ	Э	Π	‘	¿	İ	İ	İ	İ	

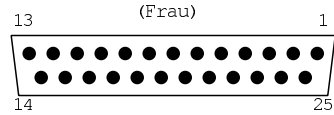
Bus, Interface, CPU



Ansicht ISA-Bus (von Oben)



Parallele Schnittstelle am Computer



Pin	Name	Beschreibung
1*	Strobe	Anligende Daten sind Gültig
2..9	Daten	Daten (1Byte)
11	Busy	Gerät (z.B. Drucker) nicht empfangsbereit
18-25	GND	Masse

* = active low

