1. Display

Bezeichnung:	DEM 240320A TMH-PW-N
Größe:	2,2“
Displayformat:	240xRGBx320
Größe Modul:	40.30 x 58.10 + 3.05
Typ:	TFT
Hintergrundbeleuchtung:	LED White (Lebensdauer 50000h)
MPU Schnittstelle:	18/16/9/8-Bit Parallel, Serial, RGB, VSYNC
Grafikcontroller:	HIMAX8346 on Module
Farben:	262k = 18Bit
Temperaturbereich:	-20 bis +70
Preis:	noch offen

2. Anbindung

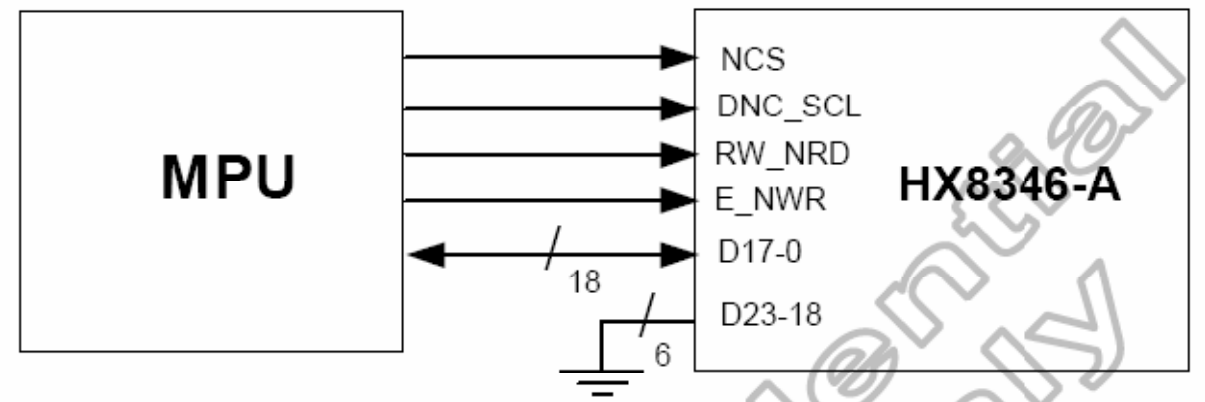


Figure 5. 10 Example of I80- / M68- System 18-bit Parallel Bus Interface

2.1 Einstellungen

IFSEL1	IFSEL0	RGB_EN	Register Data	Display Data
0	0	0	Command-parameter interface	Command-parameter interface
0	1	0	Register-content interface	Register-content interface
0	1	1	Register-content interface	RGB interface
1	X	1	Register-content interface (with Hardware control interface)	RGB interface

X means don't care

Table 5. 1 Interface Mode Selection

P68	Input signal format selection
0	Format for I80 series MPU
1	Format for M68 series MPU

Table 5. 2 MPU selection in Register-content Interface Circuit

BS2	BS1	BS0	Interface	Transferring Method of RAM data	Transferring Method of Command
0	0	0	16-bit system interface	16-bit collective	8-bit collective
0	0	1		16-bit + 2 bit	
0	1	0	18-bit system interface	18-bit collective	
0	1	1	8-bit system interface	8-bit + 8-bit + 8-bit	
1	1	x	Serial bus transfer interface	16 or 24-bit serial	8-bit serial

Table 5. 3 Interface Selection in Register-content Interface Mode

2.2 Operation

Operations	E_NWR	RW_NRD	DNC_SCL
Writes Indexes into IR	0	1	0
Reads Internal status	1	0	0
Writes command into register or data into GRAM	0	1	1
Reads command from register or data from GRAM	1	0	1

Table 5. 4 Data Pin Function for I80 Series CPU

Operations	E_NWR	RW_NRD	DNC_SCL
Writes Indexes into IR	1	0	0
Reads Internal status	1	1	0
Writes command into register or data into GRAM	1	0	1
Reads command from register or data from GRAM	1	1	1

Table 5. 5 Data Pin Function for M68 Series CPU

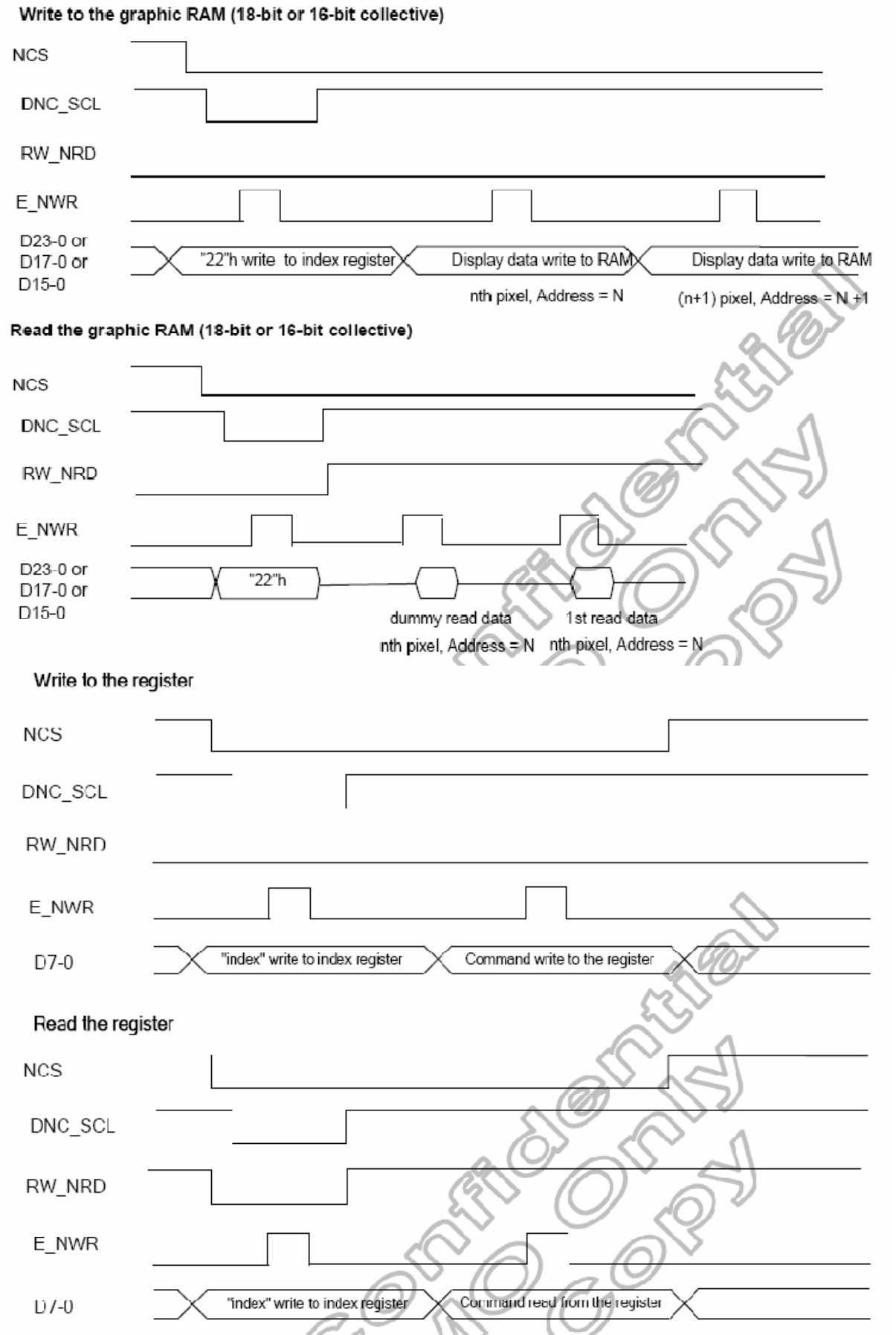


Figure 5. 4 Register read/write Timing in Parallel Bus System Interface (for M68 series MPU)

3. Timinig

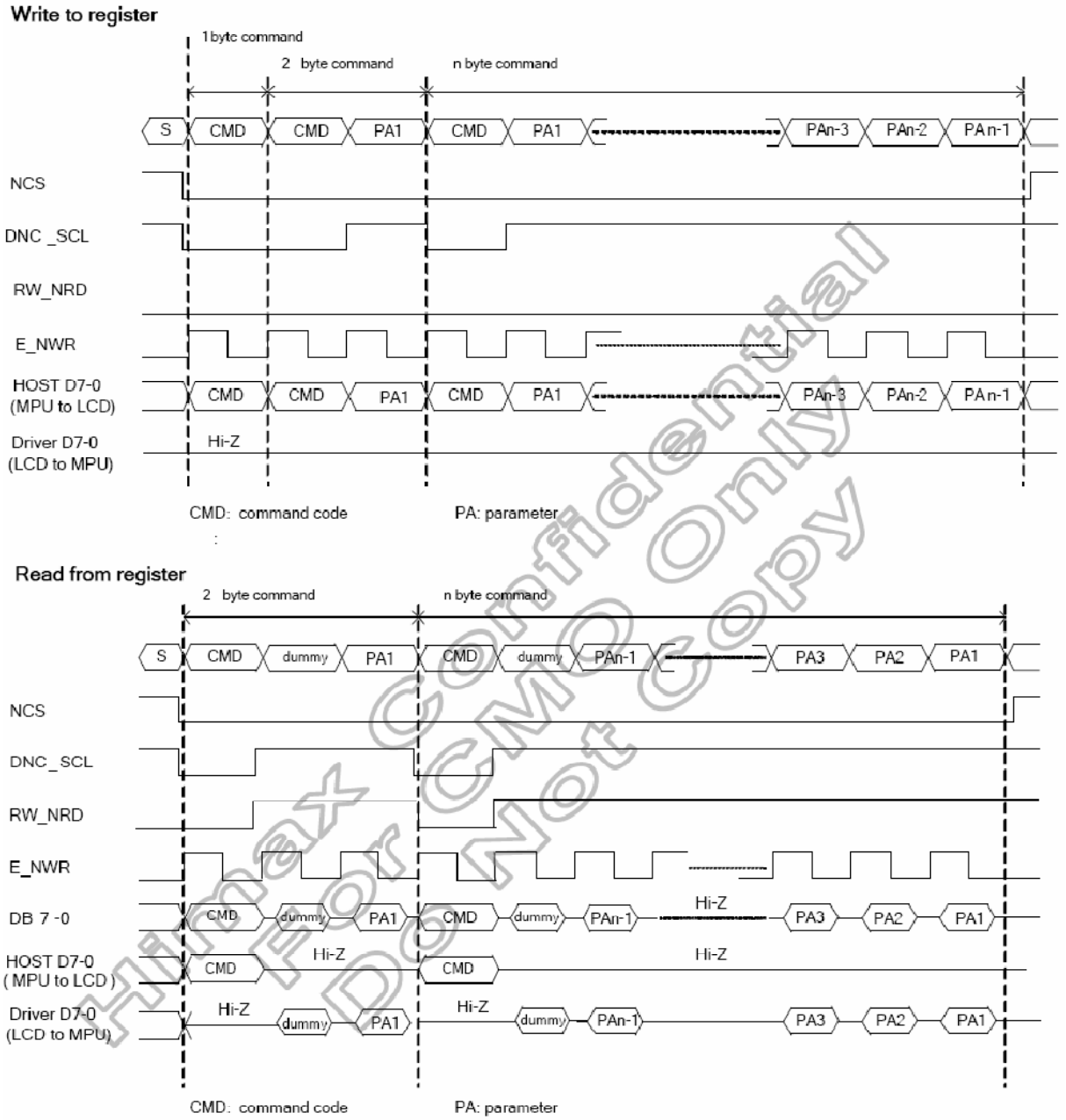
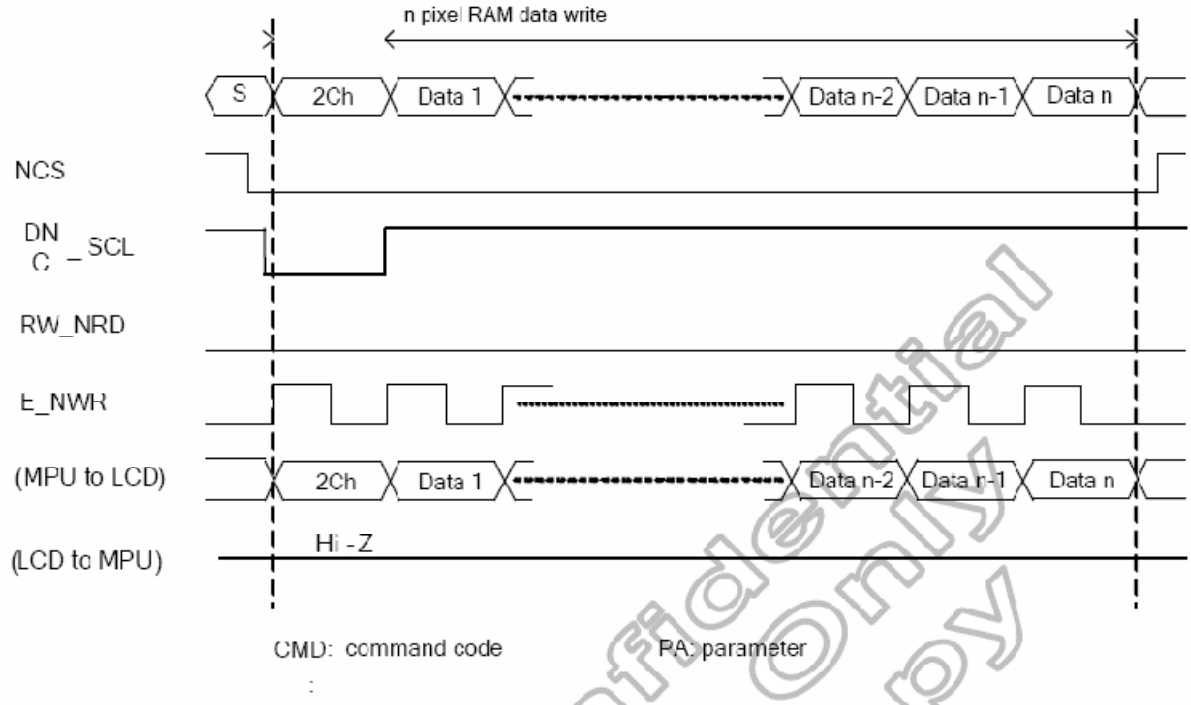


Figure 5. 17 Register read/write Timing in Parallel Bus System Interface (for M68 series MPU)

Write to GRAM



Read from GRAM

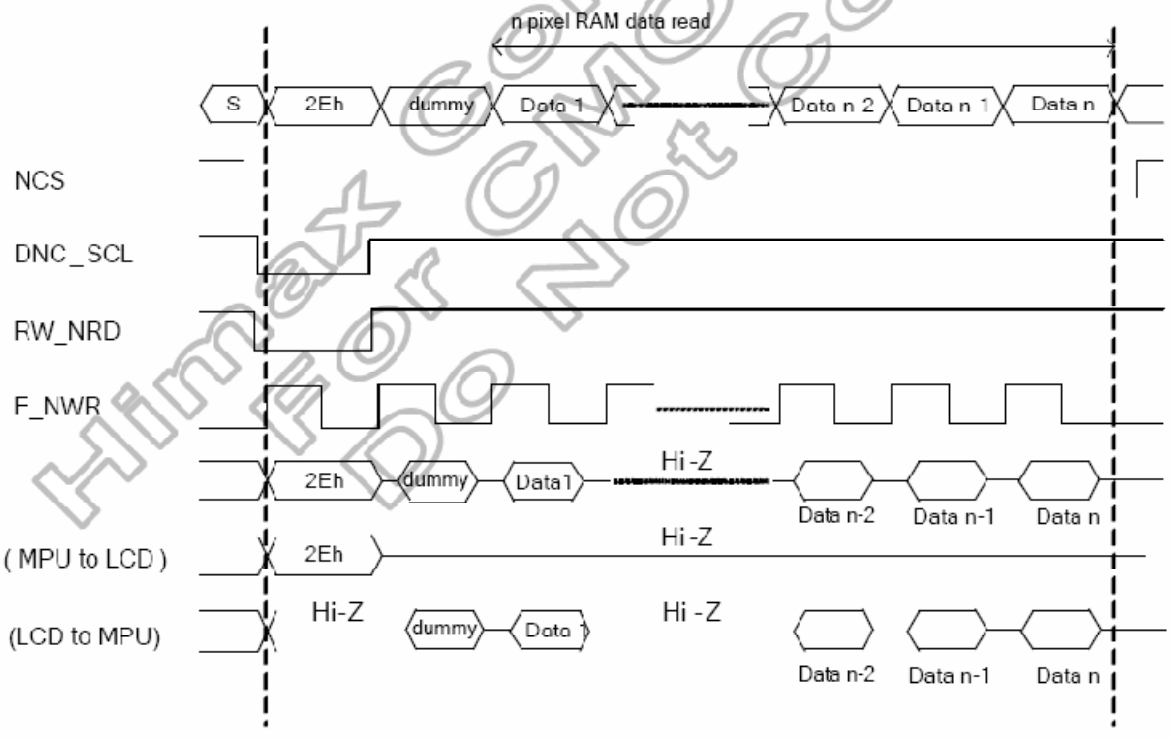


Figure 5. 19 GRAM Read/Write Timing in Parallel Bus System Interface (for M68 series MPU)