

This document is a compilation of the restrictions of the corresponding products that have already been reported, and will be utilized in the NEC microcomputer technical document browsing service. All the restrictions as of September 18, 2001 are included.

NEC Microcomputer Technical Information

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μPD780232 Subseries Usage Restrictions		Document No.	SBG-T-2505-E	1/1
		Date issued	September 18, 2001	
		Issued by	Microcomputer Engineering Dept. Solution Engineering Div. NEC Electron Devices NEC Corporation	
Related documents	User's manual (U13364EJ1V0X300) Data sheet (U13415EJ2V0DS00) Data sheet (U14258EJ1V0DS00)	Notification classification	√	Usage restriction
				Upgrade
				Document modification
				Other notification

1. Affected products

 μPD780232

 μPD78F0233

2. List of restrictions

 The restriction history and detailed information is described in Attachment 1.

List of Usage Restrictions in μ PD780232 Subseries

1. Product Version

μ PD780232: Rank K

μ PD78F0233: Rank E

* The rank is indicated by the letter appearing as the 5th digit from the left in the lot number marked on each product.

2. Product History

<Mask ROM version>

Description		UPD780232
	Rank	K
Item 1	Restriction on VFD display	Δ

<Flash memory version>

Description		UPD78F0233
	Rank	E
Item 1	Restriction on VFD display	Δ

Notes 1. The rank is indicated by the fifth character from the left in the lot number marked on the package.

2. The meaning of each symbol is as follows.

–: Restriction does not apply

\surd : Restriction already corrected

\times : Restriction applies (correction is planned)

Δ : Restriction applies (correction is not planned)

3. Details of Usage Restrictions

Item 1: Refer to Attachment 2 for details.

4. Other Cautions

None.

Item 1. Restriction on VFD display

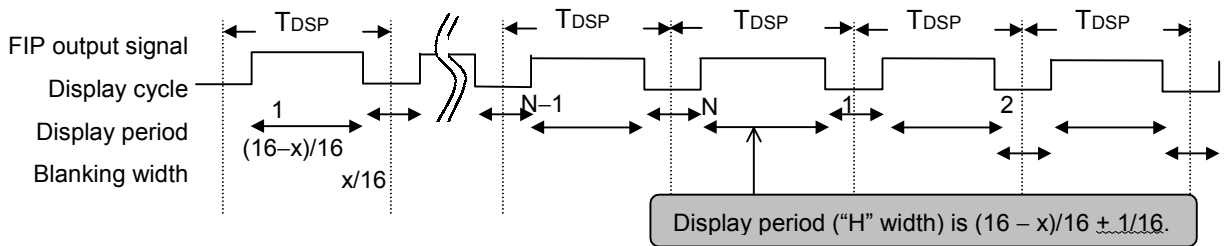
[Description]

The operation varies according to the specifications of the blanking width, number of display pattern, display cycle, key scan cycle insertion as follows.

Blanking Width		1/16	2/16	4/16	6/16	8/16	10/16	12/16	14/16
Key scan cycle	Not inserted	The Nth display period is +1/16. (See <1>.)		The blanking width between “N – 1” and “N” is x/16 + 1/16. (See <2>.)					
	Inserted	The key scan cycle is TDSP + 1/16. (See <3>.)							

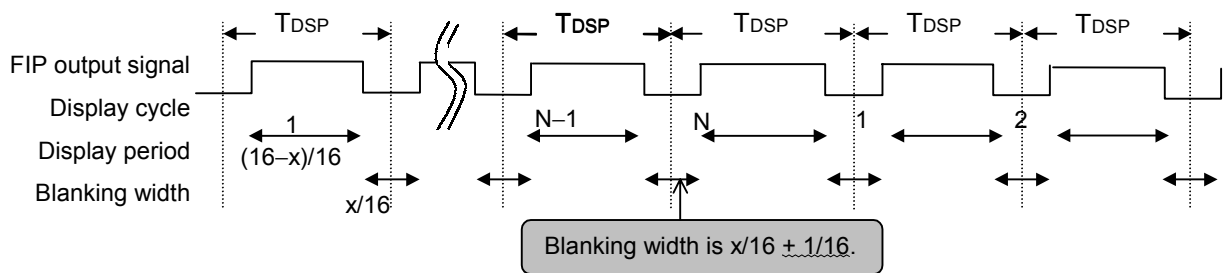
Note The example of output waveform is shown in <1>, <2>, <3> below.

<1> Condition: Blanking width: 1 or 2, key scan cycle: Not inserted



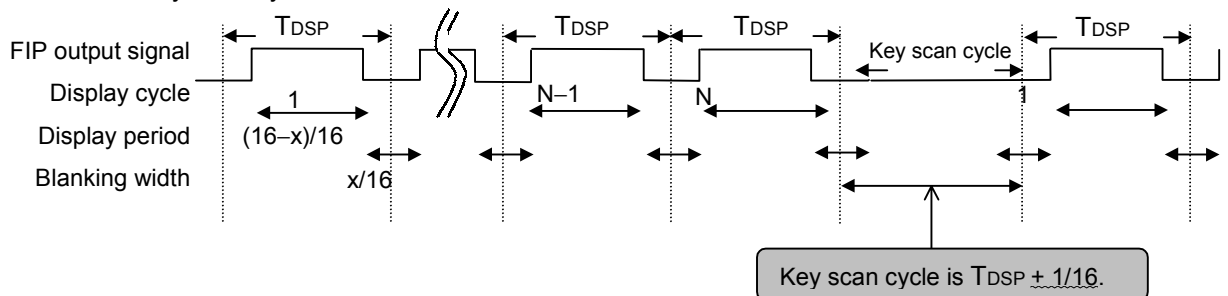
- Remarks 1.** Display cycle: $T_{DSP} = 1$ (Normal: 16/16)
- 2.** $x = 1, 2, 4, 6, 8, 10, 12, 14$ (Set value for DSPM1.5 to DSPM1.7)

<2> Condition: Blanking width: 4 to 16, key scan cycle: Not inserted



- Remarks 1.** Display cycle: $T_{DSP} = 1$ (Normal: 16/16)
- 2.** $x = 1, 2, 4, 6, 8, 10, 12, 14$ (Set value for DSPM1.5 to DSPM1.7)

<3> Condition: Key scan cycle: Not inserted



- Remarks 1.** Display cycle: $T_{DSP} = 1$ (Normal: 16/16)
- 2.** $x = 1, 2, 4, 6, 8, 10, 12, 14$ (Set value for DSPM1.5 to DSPM1.7)

[Workaround]

Regard this as a usage restriction. This information will be added when the document is next revised.