

<p style="text-align: center;">μPD789104A, 789114A, 789124A, 789134A Subseries</p> <p style="text-align: center;">Technical Information</p>		Document No.	SBG-DT-03-0051-E	1/1
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Related documents	User's Manual: U14643EJ1V1UM00 Data Sheet: U14590EJ1V1DS00 Data Sheet: U14925EJ1V1DS00 Data Sheet: U14678EJ1V1DS00 Data Sheet: U14926EJ1V0DS00 Data Sheet: U15929EJ1V0DS00	Notification classification		Usage restriction
				Upgrade
			√	Document modification
			√	Other notification

1. Affected products

μPD789101, 789102, 789104, 789111, 789112, 789114, 78F9116

μPD789121, 789122, 789124, 789131, 789132, 789134, 78F9136

μPD789101A, 789102A, 789104A, 789111A, 789112A, 789114A, 78F9116A

μPD789121A, 789122A, 789124A, 789131A, 789132A, 789134A, 78F9136A

μPD78F9116B

μPD78F9136B

2. Addition of specifications

The following specifications have been added to the serial interface.

- SS20 setup time (to SCK20 1st edge)
- SS20 hold time (from SCK20 last edge)

See the attachment for details of the added specifications.

**[Addition of specifications]**

The following specifications have been added to the serial interface.

- $\overline{SS20}$  setup time (to  $\overline{SCK20}$  1st edge)
- $\overline{SS20}$  hold time (from  $\overline{SCK20}$  last edge)

$V_{DD} = 1.8$  to  $5.5$  V,  $T_A = -40$  to  $+85^\circ\text{C}$

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
$\overline{SS20}$ setup time (to $\overline{SCK20}$ 1st edge)	$t_{SSK2}$	$2.7\text{ V} \leq V_{DD} \leq 5.5\text{ V}$	100			ns
			150			ns
$\overline{SS20}$ hold time (from $\overline{SCK20}$ last edge)	$t_{KSS2}$	$2.7\text{ V} \leq V_{DD} \leq 5.5\text{ V}$	400			ns
			600			ns

The new specifications of the (A1) and (A2) versions are as follows.

$V_{DD} = 4.5$  to  $5.5$  V,  $T_A = -40$  to  $+105^\circ\text{C}$  ( $\mu\text{PD78F9116B(A1)}$ ,  $78F9136B(A1)$ )

$T_A = -40$  to  $+110^\circ\text{C}$  ( $\mu\text{PD78910xA(A1)}$ ,  $78911xA(A1)$ ,  $78912xA(A1)$ ,  $78913xA(A1)$ )

$T_A = -40$  to  $+125^\circ\text{C}$  ( $\mu\text{PD78910xA(A2)}$ ,  $78911xA(A2)$ ,  $78912xA(A2)$ ,  $78913xA(A2)$ )

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
$\overline{SS20}$ setup time (to $\overline{SCK20}$ 1st edge)	$t_{KSS2}$		100			ns
$\overline{SS20}$ hold time (from $\overline{SCK20}$ last edge)	$t_{KSS2}$		400			ns

