Product Change Notice (PCN)

Subject: Datasheet and Wafer Fabrication Site Change for the Listed Intersil EL4340* Products – *NXP Semiconductor Nijmegen, Netherlands*

Publication Date: 10/5/2017
Effective Date: 1/5/2018

Revision Description:
Revision 0: Initial Release

Description of Change:
This notice is to inform you that Intersil has qualified the NXP Semiconductor facility in Nijmegen, Netherlands for wafer fabrication of the EL4340* HS6 technology product. The data sheet has been updated to align the specification with the characteristics of the product. See appendix A for details.

Products impacted by the change are:
EL4340IUZ EL4340IUZ-T13 EL4340IUZ-T7

Reason for Change:
The change in wafer fabrication site is necessary as the NXP facility in Fishkill, New York has discontinued manufacturing operations. The HS6 technology wafer fabrication process has been relocated from the NXP Fishkill to the NXP Nijmegen facility. The updated data sheet is available on the Intersil web site at: EL4340 Datasheet

Product Identification:
There will be no change in the external marking of the packaged parts. Product affected by this change is identifiable via Intersil's internal traceability system.

Impact on fit, form, function, quality & reliability:
The change will have no other impact on the form, fit, function, quality, reliability and environmental compliance of the devices.

Qualification status: Complete, see Appendix B
Sample availability: 10/5/2017
Device material declaration: Available upon request

Questions or requests pertaining to this change notice, including additional data or samples, must be sent to Intersil within 30 days of the publication date.

For additional information regarding this notice, please contact your regional change coordinator (below)			
Americas: PCN-US@INTERSIL.COM	Europe: PCN-EU@INTERSIL.COM	Japan: PCN-JP@INTERSIL.COM	Asia Pac: PCN-APAC@INTERSIL.COM

Appendix A:

From:

Electrical Specifications V+ = +5V, V- = -5V, GND = 0V, T_A = +25°C, Input Video = $1V_{P-P}$ and R_L = 500Ω to GND, C_L = 5pF unless otherwise specified.

PARAMETER	DESCRIPTION	CONDITIONS	MIN	TYP	MAX	UNIT
GENERAL						
$+I_S$ Enabled	Enabled Supply Current (EL4340)	No load, V_{IN} = 0V, $\overline{Enable}$ Low	26	30	34	mA
	Enabled Supply Current (EL4342)		39	46	50	mA
$-I_S$ Enabled	Enabled Supply Current (EL4340)	No load, V_{IN} = 0V, $\overline{Enable}$ Low	-32	-30	-24	mA
	Enabled Supply Current (EL4342)		-46	-46	-36.5	mA
$+I_S$ Disabled	Disabled Supply Current (EL4340)	No load, V_{IN} = 0V, $\overline{Enable}$ High	2.3	2.8	3.3	mA
	Disabled Supply Current (EL4342)	No load, V_{IN} = 0V, $\overline{Enable}$ High	3	3.5	4	mA
$-I_S$ Disabled	Disabled Supply Current	No load, V_{IN} = 0V, $\overline{Enable}$ High		10	100	µA
V_{OUT}	Positive and Negative Output Swing	V_{IN} = ±3.5V, R_L = 500Ω	±3.1	±3.4		V
I_{OUT}	Output Current	R_L = 10Ω to GND	±60	±135		mA
V_{OS}	Output Offset Voltage (EL4340)		-15	7	+15	mV
V_{OS}	Output Offset Voltage (EL4342)		-10		+10	mV
Ib	Input Bias Current	V_{IN} = 0V	-1	-2	-3	µA
R_{OUT}	HIZ Output Resistance	HIZ = Logic High		1.4		MΩ
R_{OUT}	Enabled Output Resistance	HIZ = Logic Low		0.2		Ω
R_{IN}	Input Resistance	V_{IN} = ±3.5V		10		MΩ
A_{CL} or A_V	Voltage Gain	V_{IN} = ±1.5V, R_L = 500Ω	0.98	0.99	1.02	V/V
I_{TRI}	Output Current in Three-state	V_{OUT} = 0V	8	15	22	µA
LOGIC						
V_{IH}	Input High Voltage (Logic Inputs)		2			V
V_{IL}	Input Low Voltage (Logic Inputs)				0.8	V
I_{IH}	Input High Current (Logic Inputs)	V_H = 5V	215	270	320	µA
I_{IL}	Input Low Current (Logic Inputs)	V_L = 0V		2	3	µA

To:

Electrical Specifications V+ = +5V, V- = -5V, GND = 0V, T_A = +25°C, Input Video = $1V_{P-P}$ and R_L = 500Ω to GND, C_L = 5pF unless otherwise specified.

PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
GENERAL						
Enabled Supply Current (EL4340)	$+I_S$ Enabled	No load, V_{IN} = 0V, $\overline{Enable}$ Low	21.5	30	34	mA
Enabled Supply Current (EL4342)			39	46	50	mA
Enabled Supply Current (EL4340)	$-I_S$ Enabled	No load, V_{IN} = 0V, $\overline{Enable}$ Low	-32	-30	-21	mA
Enabled Supply Current (EL4342)			-48	-46	-36.5	mA
Disabled Supply Current (EL4340)	$+I_S$ Disabled	No load, V_{IN} = 0V, $\overline{Enable}$ High	1.75	2.8	4.2	mA
Disabled Supply Current (EL4342)		No load, V_{IN} = 0V, $\overline{Enable}$ High	3	3.5	4	mA
Disabled Supply Current	$-I_S$ Disabled	No load, V_{IN} = 0V, $\overline{Enable}$ High		10	100	µA
Positive and Negative Output Swing	V_{OUT}	V_{IN} = ±3.5V, R_L = 500Ω	±3.1	±3.4		V
Output Current	I_{OUT}	R_L = 10Ω to GND	±80	±135		mA
Output Offset Voltage (EL4340)	V_{OS}		-15	7	+15	mV
Output Offset Voltage (EL4342)	V_{OS}		-10		+10	mV
Input Bias Current	Ib	V_{IN} = 0V	-0.5	-2	-3	µA
HIZ Output Resistance	R_{OUT}	HIZ = Logic High		1.4		MΩ
Enabled Output Resistance	R_{OUT}	HIZ = Logic Low		0.2		Ω
Input Resistance	R_{IN}	V_{IN} = ±3.5V		10		MΩ
Voltage Gain	A_{CL} or A_V	V_{IN} = ±1.5V, R_L = 500Ω	0.98	0.99	1.02	V/V
Output Current in Three-State	I_{TRI}	V_{OUT} = 0V	8	15	22	µA
LOGIC						
Input High Voltage (Logic Inputs)	V_{IH}		2			V
Input Low Voltage (Logic Inputs)	V_{IL}				0.8	V
Input High Current (Logic Inputs)	I_{IH}	V_H = 5V	215	270	340	µA
Input Low Current (Logic Inputs)	I_{IL}	V_L = 0V		2	3	µA
AC GENERAL						
0.1% Settling Time	t_S	Step = 1V		10		ns
Power Supply Rejection Ratio	PSRR (EL4340)	DC, PSRR V+ and V- combined	52	72		dB
Power Supply Rejection Ratio	PSRR (EL4342)	DC, PSRR V+ and V- combined	52	56		dB

Appendix B: NXP HS6 Technology Qualification Summary

Reliability Test	EL4543 NXP - HS6 Wafer Fabrication Process 24 Lead QSOP	ISL1557 NXP - HS6 Wafer Fabrication Process 16 LEAD 4X4 QFN
High Temperature Operating Life	0/240 125C for 2000 hours disposition = Passed	0/80 125C for 2000 hours disposition = Passed
High Temperature Storage	0/78 150C Bake and Reflow, 1000 hours disposition = Passed	N/A
Unbiased HAST	0/80 130C, 85%RH for 96 hours disposition = Passed	0/78 130C, 85%RH for 96 hours disposition = Passed
Biased HAST	0/158 130C, 85%RH for 96 hours disposition = Passed	N/A
Bond Pull Integrity	0/6 175C for 96hours disposition = Passed	0/3 175C for 96hours disposition = Passed
Temperature Cycle	0/80 -40C to 125C, 1000 cycles disposition = Passed	0/78 -40C to 125C, 1000 cycles disposition = Passed