## nexperia

## **Reliability Monitoring Results**

## Quarters: Q1/2022 to Q4/2022

Based on structural similarity

Suppli	ier	User Part Number							
Nexperia B.V.		74CBTLV3384PW	74CBTLV3384PW						
Part D	escription: 10-bit bus swite	ch							
Pro	nction Family: CBTLV(D) cess family: C075 kage family: TSSOP								
JESD4	7 Test	Test Conditions	Duration	# Lots	# Quantity	# Rejects			
	TEST				<b>-</b>	see			
# 1	Pre- and Post-Stress Electrical Test	Tamb = 25 °C	N/A	see below	all parts	below			
# 2	<b>PC</b> Preconditioning	JESD22-A113 MSL 1	N/A	1070	83683	0			
# 5a	HTOL EFR High Temperature Operating Life Extrinsic	JESD22-A108 Tj = 150°C $V_{CCMAX} \le V \le 1.2*V_{CCMAX}$	48 hours or 168 hours	240	41981	0			
# 5b	HTOL IFR High Temperature Operating Life Intrinsic	JESD22-A108 Tj = 150°C $V_{CCMAX} \le V \le 1.2*V_{CCMAX}$	≥500 hours	99	7448	0			
# 7	TC Temperature Cycling	JESD22-A104 -65 °C to 150°C	≥500 cycles	549	43127	0			
# 9	uHAST / HAST unbiased or biased High Accelerated Stress Test	JESD22-A101 Tamb = 130 °C, RH = 85%, V = V <sub>CCMAX</sub>	96 hours	521	40556	0			

## **Calculation of PPM, FIT and MTTF**

Test considered for PPM calculation: High Temperature Operating LifeTest Extrinsic (HTOL EFR, Test # 5a above) Test considered for FIT and MTTF calculations: High Temperature Operating LifeTest Intrinsic(HTOL IFR, Test # 5b above)

Confidence level 60%, derated to 55 °C, activation energy 0.7 eV, test time 168 to 1000 hours

Product Family	Package Family	Quantity	Rejects	Extrinsic Failure Rate (PPM)	Intrinsic Failure Rate (FIT)	MTTF (hrs)
CBTLV(D)	TSSOP	7448	0	22	0.6	1.83 E+09

All information hereunder is per Nexperia's best knowledge. This document does not provide for any representation or warranty express or implied by Nexperia. In case Nexperia has tested the product, this documentation reflects the outcome of the analysis of the actually tested parts only.