

Qualification Description:

The information contained herein represents proof of Reliability and Performance of the baseline process technology listed below in accordance with the Qualification Plan and test methods referenced in Section 8.0, after exposure to a variety of environments (electrical, thermal, humidity, etc) and mechanical events that may occur during installation and operational lifetime of the product. Upon conclusion of the testing the product continued to operate within specification limits, demonstrating its capability of reliable operation throughout its lifetime.

The purpose of this report is to present Qualification Test results of the of referenced process technology. The Pericom product data presented in this report qualifies all products manufactured using the exact semiconductor materials and processing techniques used in the baseline process and its off-shoot processes. The report describes the qualification test program, procedures used, criteria enforced (at the time of product validation), and the resulting test data obtained during the Qualification Test. The materials and processing techniques used in the baseline process are incorporated into the off-shoot processes, so the quality/integrity of the baseline and off-shoots (i.e.: 2PxM, 1PxM) processes will be equivalent.

Lot Background Information:

Qual Test Date:	Jun-2015	Qual by Ext. Process:	0.50um 3PxM
Process Technology:	0.50um 3P2M		0.50um 2PxM
Foundry & Code:	MGN Fab3 (G)		0.50um 1PxM
		Qual Vehicle(s):	PI3USB102EZLE

Pericom's Qualification Test Results:

Stress Test	Test Procedure	Test Conditions	Duration (hrs)	# of Lots	Samples per Lot	Results Pass/Fail
Dynamic High Temp	JESD22-A108	1000 hrs 5.5V 125°C	168	3	77	231 / 0
Operating Life (DHTOL)	JESD22-A108	1000 hrs 5.5V 125°C	500	3	77	231 / 0
PI3USB102EZLE (GTK)	JESD22-A108	1000 hrs 5.5V 125°C	1000	3	77	231 / 0
	ELFR based on 231 units after completion of 168 hrs HTOL FIT Rate based on 231 units after completion of 1000 hrs	ELFR Rate (55C, 0.7eV, 5.5V, 60%)	160.9			
		FIT Rate (55C, 0.7eV, 5.5V, 60%)	27.0			
		Calculated MTBF	36,992,742			
Temp Cycle Test	JESD22-A104	-65°C to 150°C, 500cyc	100 cycles	4	77	308 / 0
PI3USB102EZLE (GTK-3 lots) & PI3USB102EZLE (UTL-1 lot)		-65°C to 150°C, 500cyc	500 cycles	4	77	308 / 0
High Temp Storage (HTS)	JESD22-A103	1000hrs, 0V, 150°C	168 hrs	4	77	308 / 0
		1000hrs, 0V, 150°C	500 hrs	4	77	308 / 0
PI3USB102EZLE (GTK-3 lots) & PI3USB102EZLE (UTL-1 lot)		1000hrs, 0V, 150°C	1000 hrs	4	77	308 / 0
Latch Up Test	JESD78	Report available by Device				
ESD-HBM Test	JESD22-A114	Report available by Device				

Qualification by Extension Information:

It is valid to use the reliability data of a particular process technology and apply to all products within this process technology family. All parts within the same family are designed to the same rules (layout & electrical), and manufacturing is controlled by SPC. Within a product family, a device can only be fabricated on one process technology option.

If there are any questions about this qualification, please contact Quality Support at: customerquestion@pericom.com

Date: Jun-2015
 Subject: Pericom Process Qualification Report
 Mfg-Fab-Process: MGN Fab3 (G) 0.50um 3P2M and by extension: 3PxM, 2PxM, 1PxM
 Qual Device: PI3USB102EZLE

Part Numbers qualified by extension using this Fab and Process:

PI4ULS5V102GAE	PT7C5020ALC-2GWF	PT7C5024AL4TAE	PT7M7809TTE	PT7M8202B28TA5E
PI4ULS5V104GAE	PT7C5020ALC-2WF	PT7C5027B1-2DE	PS8A0143BPE	PT7M8202B33TA5E
PI5A3157BC6E	PT7C5020ALC-5GDE	PT7C5027B1-5GWF	PT8A3227AWE	PT7C5036A1-2GDE
PI5A3158BZAE	PT7C5020ALC-5GWF	PT7C5027B2-2DE	PT8A3227APE	PT7M8206B12TA5E
PS8A0040CPE	PT7C5006ANC-2DE	PT7C5027B3-2DE	PT7M7809TUWF	PT7C5036A1-2DE
PS8A0040APE	PT7C5020ALF-2GDE	PT7C5027C1-2DE	PT7M7809ZTE	PT7C5036A1-2WF
PS8A0040AWE	PT7C5020ALF-2GWF	PT7C5027C1-2WF	PT7M7809ZTE	PT7M8206B18TA5E
PS8A0040AWE	PT7C5020ALF-2WF	PT7C5027C1-5GDE	PT7C5027J1-5GDE	PT7C5037A1-2GDE
PS8A0040CWE	PT7C5020ALF-5GDE	PT7C5027C1-5GWF	PT7M7810RTE	PT7C5037A1-2GWF
PS8A0040CWE	PT7C5020ALF-5GWF	PT7C5027C1-5UWF	PT7M820125TA3E	PT7C5037A1-2DE
PS8A0123ASE	PT7C5021AATAE	PT7C5027C2-2DE	PT7M7810STE	PT7C5037A1-2WF
PS8A0123BSE	PT7C5021AATAE	PT7C5027C2-2WF	PT7M7810TTE	PT7M820518TA3E
PS8A0125BSE	PT7C5006ANC-2WF	PT7C5027C2-5GDE	PT7C5035ALD-2DE	PT7M820525TA3E
PS8A0089QWE	PT7C5006ANCWE	PT7C5027C2-5GWF	PT7C5035ALD-2GDE	PT7M820528TA3E
PS8A0089SWE	PT7C5006AND-2DE	PT7C5027C3-2DE	PT7C5035ALD-5GDE	PT7M820530TA3E
PS8A0089TWE	PT7C5006AND-2WF	PT7C5027C3-5GDE	PT7C5035ALD-2GWF	PT7M820533TA3E
PS8A0106SE	PT7C5006ANE-2DE	PT7C5027C4-2DE	PT7C5035ALD-5GWF	PT8A3289QWE
PS8A0143APE	PT7C5006ANE-2WF	PT7C5027C4-2WF	PT7M7811STBE	PT8A3351ALE
PS8A0143BWE	PT7C5009AL1-2DE	PT7C5027C5-2DE	PT8A3227PE	PI4ULS5V102UE
PS8A0143HWE	PT7C5009AL1-2WF	PT7C5027J1-5GWF	PT8A3355ALE	PT8A2766EWE
PT7C5002LBWE	PT7C5009AL1WE	PT7C5027KC1-2WF	PT7C5027B3-2WF	PT7M84111228TT6E
PT7C5002LCWE	PT7C5009AL2-2DE	PT7C5027KC1-5GWF	PT7C5027B3-5GDE	PT7M8202B28TA5E
PT7C4302WE	PT7C5009AL2-2WF	PT7C5027KC1-5UWF	PT7C5027B3-5GWF	PT7M8206B28TA5E
PT7C5002LD-2WF	PT7C5023BNDAE	PT7M8201B15TA5E	PT7M84112818TT6E	PT7M8208B30ZUE
PT7C4307WE	PT7C5009AL3-2DE	PT7C5027KC2-5UWF	PT7M820128TA3E	PT7C5035BLC-2GWF
PT7C5002LE-2WF	PT7C5009AL3-2WF	PT7M8201B30TA5E	PT7M820130TA3E	PT7C5035BLC-2WF
PT7C5002LEWE	PT7C5009AL4-2DE	PT7C5035ALA-2DE	PT7M820112TA3E	PT7C5035BLC-5GWF
PT7C4311WE	PT7C5009AL4-2WF	PT7C5035ALA-2DE	PT8A3263AWE	PT7C5038A1-2GDE
PT7C5006ANB-2WF	PT7C5009AL5-2DE	PT7C5035ALA-2WF	PT8A3263APE	PT7C5038A1-2GWF
PT7C4311ZEE	PT7C5027B1-2WF	PT7C5035ALA-2WF	PS8A0143AWE	PT7C5036G1-2WF
PT7C5006ANDWE	PT7C5027B1-5GDE	PT7C5035ALB-2WF	PT7M820118TA3E	PT7C5036G1-2DE
PT7C5006ANEWE	PT7C5009AL5WE	PT7C5035ALC-2DE	PT7M820133TA3E	PT7C5036G1-2GDE
PT7C5009AL2WE	PT7C5009AN1-2WF	PT7C5035ALC-2WF	PT7M8206B25TA5E	PT7C5036G1-2GWF
PT7C5009AL3WE	PT7C5027B2-2WF	PT7C5035ALD-2WF	PT7M8206B28TA5E	PT8A2766AWE
PT7C5009AL4WE	PT7C5027B2-5GDE	PT7C5035ALF-2DE	PT7M8206B30TA5E	PT8A2766DWE
PT7C5002LB-2DE	PT7C5027B2-5GWF	PT7C5035ALF-2WF	PT7M8206B13TA5E	PI5A4157CE
PT7C5009AL6-2DE	PT7C5009AN2-2WF	PT7C5036A1-2GWF	PT7M8206B15TA5E	PI5PD2065UEE
PT7C5009AL6WE	PT7C5035ALA-2GDE	PT7C5036B1-2GWF	PT7M8202B13TA5E	PI5A4158ZAE
PT7C5009AN1-2DE	PT7C5009AN3-2WF	PT7C5037B1-2GWF	PT7M8201B12TA5E	PT7C5027C2-5UWF
PT7C5002LB-2WF	PT7C5035ALA-5GDE	PT7M6122NLTA3E	PT7M8202B30TA5E	PT7C5027C3-2WF
PT7C5009AN1WE	PT7C5035ALA-5GWF	PT8A3298PE	PI5PD2065WE	PT8A2766ITAE
PT7C5009AN2-2DE	PT7C5035ALB-2DE	PT8A3298WE	PI5PD2065TAE	PT7C5027C3-5GWF
PT7C5002LC-2DE	PT7C5035ALB-2GDE	PT8A3353ASE	PI5PD2069WE	PT7C5027C3-5UWF
PT7C5009AN2WE	PT7C5035ALB-2GWF	PT8A3353BSE	PI5PD2068-1UWF	PT8A2767FWE
PT7C5009AN3-2DE	PT7C5009AN4-2WF	PT8A3355ASE	PT8A3298AWE	PT8A3222WE
PT7C5002LC-2WF	PT7C5035ALB-5GDE	PT8A3355BSE	PT8A3298APE	PT7C5027C4-5GDE
PT7C5009AN4-2DE	PT7C5035ALB-5GWF	PT8A3410WE	PT7M8208B28ZUE	PT7C5027C4-5GWF
PT7C5002LD-2DE	PT7C5014AL1-2DE	PT8A3411PE	PT7M8208B12ZUE	PT7C5027C4-5UWF
PT7C5009AN5-2DE	PT7C5035ALC-2GDE	PT8A3411WE	PT7M8208B18ZUE	PT7C5020ALF-2GDE
PT7C5009AN5-2WF	PT7C5035ALC-2GWF	PT8A3412PE	PT7M8201B18TA5E	PT8A3227WE
PT7C5009AN6-2DE	PT7C5020ALA-2DE	PT8A3412WE	PT7M8201B25TA5E	PT7C5020ALF-5GDE
PT7C5009AN6-2WF	PT7C5035ALC-5GDE	PT8A3413PE	PT7M8201B28TA5E	PT7C5020ALF-2GWF
PT7C5002LDWE	PT7C5035ALC-5GWF	PT8A3413WE	PT7M8201B33TA5E	PT7C5020ALF-2WF
PT7C5014AL1-2WF	PT7C5020ALB-2DE	PT7M6130NLTA3E	PT8A3222PE	PT7C5020ALF-5GWF
PT7C5014AL1-3DE	PT7C5020ALC-2DE	PT7M6133NLTA3E	PT7M8202B12TA5E	PT7C5035ALF-2GDE
PT7C5015AL1-2DE	PT7C5020ALD-2DE	PT7M6142NLEC3E	PT7C5036B1-2WF	PT7C5035ALF-5GDE
PT7C5015AL1-2WF	PT7C5020ALF-2DE	PT7M6427NLTA3E	PT7C5036B1-2DE	PT7C5035ALF-2GWF
PT7C5002LE-2DE	PT7C5020ALF-2DE	PT7M6430NLTA3E	PT7C5036B1-2GDE	PT7C5035ALF-5GWF
PT7C5020ALA-2GDE	PT7C5020ALS-2DE	PT7M7803RTE	PT7M8202B18TA5E	PS8A0389MWE
PT7C5020ALA-2GWF	PT7C5021ABTAE	PT7M7803STE	PT7C5037B1-2WF	PS8A0389QWE
PT7C5020ALA-2WF	PT7C5021ACTAE	PT7M7803TTE	PT7C5037B1-2DE	PS8A0389UWE
PT7C5020ALA-5GDE	PT7C5021ADTAE	PT7M8202B15TA5E	PT7C5037B1-2GDE	PS8A0399MWE
PT7C5020ALA-5GWF	PT7C5021AETAE	PT7M7809RTE	PT7M8202B25TA5E	PS8A0399QWE
PT7C5006ANB-2DE	PT7C5021KDTAE	PT7M7809RTE	PT7C5037G1-2WF	PS8A0399UWE
PT7C5020ALB-2GDE	PT7C5022A1ATAE	PT7M7809RUWF	PT7C5037G1-2DE	PT7C5027C5-2WF
PT7C5020ALB-2GWF	PT7C5022A3ATAE	PT7M7809STE	PT7C5037G1-2GDE	PT7C5027C5-5GDE
PT7C5020ALB-2WF	PT7C5022A5ATAE	PT7M7809STE	PT7C5037G1-2GWF	PT7C5027C5-5GWF
PT7C5020ALB-5GDE	PT7C5022A7ATAE	PT7M8206B33TA5E	PT7C5038B1-2GDE	PT7C5027C5-5UWF
PT7C5020ALB-5GWF	PT7C5024AL1TAE	PT7M7809SUWF	PT7C5038B1-2GWF	PT7C5020ALD-2GDE
PT7C5006ANBWE	PT7C5024AL2TAE	PT8A3263BWE	PT7M7803ZTE	PT7C5020ALD-5GDE
PT7C5020ALC-2GDE	PT7C5024AL3TAE	PT8A3263BPE	PT7M7803YTE	PT7C5020ALD-2GWF

Date: Jun-2015
 Subject: Pericom Process Qualification Report
 Mfg-Fab-Process: **MGN Fab3 (G) 0.50um 3P2M** and by extension: **3PxM, 2PxM, 1PxM**
 Qual Device: PI3USB102EZLE

Part Numbers qualified by extension using this Fab and Process:

PT7C5020ALD-2WF	PT7M8216B18XZE	PT7C5027C1-5UUWF	PI6ULS5V9517AZEE	PT7C5027KC5-2WF
PT7C5020ALD-5GWF	PT7M8216B20XZE	PT8A2766JTAE	PI6ULS5V9517AUE	PT7C5027KC5-5GDE
PT7C5027C1TT6E	PT7M8218B09CE	PI6C4500DEDR	PI6ULS5V9517AWE	PT7C5027KC5-5GWF
PT7C5035ALA-2GDE	PT7M8218B10CE	PI5A3166CE	PT8A3299MWE	PT7C5027KC5-5UWF
PT7C5035ALA-5GDE	PT7M8218B11CE	PI5A3166TAE	PT8A3299QWE	PT8A9A02HE
PT7C5035ALA-2GWF	PT7M8218B12CE	PI3A125BCE	PI3CH3244ZHE+C	PT8A9000HE
PT7C5035ALA-5GWF	PT7M8218B25CE	PI3A125BTAE	PI3CH800ZHE+C	PT7M6127NLT3A3E
PT7M8208B33ZUE	PT7M8218B28CE	PT8A3263HWE	PI3CH360LE+C	PT7M6250CLTA3E
PT8A3299UWE	PT7M8218B30CE	PT8A3263IWE	PI3CH480QE+C	PT7M6118NLT3A3E
PI4ULS5V4557ZHE	PT7M8218B33CE	PS8A0143IWE	PI3CH281QE+C	PT7M6140NLT3A3E
PI4JLS5V4555ZHE	PT7M8218B18CE	PT8A3289SWE	PI3CH200LE+C	PT7M6135NLT3A3E
PT8A3289TWE	PT7M8218B20CE	PI4ULS5V104ZBE	PI3CH480LE+C	PT7M6129NLEC3E
PT8A3351ASE	PT7M8218B09TAE	PI5A31582AE	PI3CH401LE+C	PT7M6143NLC4E
PT7M7811RTBE	PT7M8218B10TAE	PI5A3157CE	PI3CH400LE+C	PT7M6122CLTA3E
PT7M7811ZTBE	PT7M8218B11TAE	PI5A3167CCE	PI3CH800LE+C	PT7M6428NLT3A3E
PT7M7811MTBE	PT7M8218B12TAE	PI5A3167CTAE	PI3CH1000LE+C	PT7M6529NLCXVE
PT7M7811TTBE	PT7M8218B25TAE	PI5A121CCE	PI3CH3244LE+C	PT7M6530NLCXVE
PT7M7811LTBE	PT7M8218B28TAE	PI5A121CTAE	PI3CH800QE+C	PT7M7811RTAE
PT7M7812STBE	PT7M8218B30TAE	PT7C5027KC1-5GDE	PS8A0099QWE	PT7M7811STAE
PT8A3353ALE	PT7M8218B33TAE	PT7C5027KC1-2DE	PS8A0099MWE	PI6ULS5V9515AZEE
PI4ULS5V4558ZNE	PT7M8218B18TAE	PT7C5027KC2-2WF	PS8A0099UWE	PI6ULS5V9627AQE
PI5A4599BCE	PT7M8218B20TAE	PT7C5027KC2-5GWF	PT7M820512TA3E	PT7M6518NLT4A5E
PI5A121BCE	PI5A4157TAE	PT7C5027KC2-2DE	PT7M820513TA3E	PT7M6130NLC4E
PT7C5020ALS-2GDE	PI5A3167TAE	PT7C5027KC2-5GDE	PT7M820515TA3E	PI5A221BZWE
PT8A3410PE	PI5PD1922BWE	PI4ULS5V201TAE	PT7C5027B4-5GWF	PT7C5002LB-2WF
PT7C5020ALS-5GDE	PT7M8220B12TD5E	PI4ULS5V202XVE	PT7C5027B4-5GDE	PI6ULS5V9627AZYE
PT7C5020ALS-2GWF	PT7M8220B15TD5E	PT7M6144NLEC3E	PT7C5027B4-2WF	PI5A3157BZUE
PT7C5020ALS-2WF	PT7M8220B18TD5E	PT7M6127NLT4A5E	PT7C5027B4-2DE	PI3CH1010LE
PT7C5020ALS-5GWF	PT7M8220B25TD5E	PT7M6128NLT4A5E	PT7C4311ZEE	PI3CH3345ZHE
PT7C5037F1-2GDE	PT7M8220B33TD5E	PI6ULS5V9509WE	PT7C4511WE	PT7C5027KC1-6GDE
PT7C5037F1-2DE	PT7M8220B12TD3E	PI6ULS5V9509UE	PI4ULS5V201XVE	PT7C5027KC1-6GWF
PT7C5037F1-2GWF	PT7M8220B15TD3E	PT7M6142NLEXVE	PI4ULS5V202UE	PT7C5027KC2-6GDE
PT7C5037F1-2WF	PT7M8220B18TD3E	PT7M6144NLEXVE	PI6ULS5V9306WE	PT7C5027KC2-6GWF
PI3C3125LE	PT7M8220B25TD3E	PT7M6427NLT4A5E	PT7M6127NLC4E	PT7M6422CHTA3E
PI3C32X245BE	PT7M8220B33TD3E	PI5PD2069UEE	PI5PD4610ATAE	PI3CH1012QE
PT7C503818B1-2GDE	PT7M8220B12TA5E	PT7M6430NLCXVE	PT8A94B02WE	PT7C5027C6-5GDE
PT7C503818B1-2DE	PT7M8220B15TA5E	PT7M6529NLT4A5E	PT7C6035ALC-5GDE	PT7C5027C6-5GWF
PT7C503818B1-2GWF	PT7M8220B18TA5E	PT7M6530NLT4A5E	PT7M6223CLTA3E	PT7C5027C6-2GDE
PT7C503818B1-2WF	PT7M8220B25TA5E	PI3VT32X245-ABE	PT8A9010WE	PT7C5027C6-2GWF
PT7C5036F1-2GDE	PT7M8220B33TA5E	PI3VT3245-ALE	PT8A9011WE	PT7C5027C6-2GDE
PT7C5036F1-2DE	PT7M8221B12TD5E	PI3VT3245-AQE	PI6ULS5V9515AUE	PT7C5027C6-2GWF
PT7C5036F1-2GWF	PT7M8221B15TD5E	PT7M6134CLTA3E	PI3C32X245BE	PI5C3305LE
PT7C5036F1-2WF	PT7M8221B18TD5E	PT7M6136CLTA3E	PI3C3245LE	PI5C3306LE
PT7C503718B1-2GWF	PT7M8221B25TD5E	PT7M6127CLTA5E	PT7M6140CLTA3E	PI5C3126QE
PT7C503718B1-2WF	PT7M8221B33TD5E	PT7M6128CLTA5E	PI5A4157ZUE	PI5C3125QE
PT7C503718B1-2GDE	PT7M8221B12TD3E	PT7M6125NLC4E	PT7M6243CLTA3E	PI5C3303TE
PT7C503718B1-2DE	PT7M8221B15TD3E	PT7M6125CLTA3E	PI6ULS5V9515AWE	PI3VT3306LE
PT7C6035ALC-2WF	PT7M8221B18TD3E	PI3CH400ZBE	PI3C34X245BE	PI5A124TE
PT7C6035ALC-2GWF	PT7M8221B25TD3E	PI3C3126QE	PT7C5027C1-3DE	PI5PD2065UEE+C
PT7C6035ALC-5GWF	PT7M8221B33TD3E	PI3C3245QE	PT7C5027C2-3DE	PI5V331QE
PI5A23159UE	PT7M8221B12TA5E	PI6ULS5V9306ZEE	PT7C5027C3-3DE	PI5V330QE
PI5PD2041BTAE	PT7M8221B15TA5E	PI6ULS5V9509XTE	PT7C5027C4-3DE	PI5C33X257BE
PT7M7809GTE	PT7M8221B18TA5E	PI3C32X384BE	PT7C5027C5-3DE	PI5C3253WE
PT7M8216B09XYE	PT7M8221B25TA5E	PI3C3245LE	PI6ULS5V9617AUE	PI5C3253QE
PT7M8216B10XYE	PT7M8221B33TA5E	PI3C3126LE	PI6ULS5V9617AZEE	PT8A9001QE
PT7M8216B11XYE	PT7M8220B28TD5E	PI3C3306LE	PT7M6248CLTA3E	PT8A9002QE
PT7M8216B12XYE	PT7M8220B28TD3E	PI3C3125ZJE	PT7C5035BLC-2GDE	PT8A94B29WE
PT7M8216B25XYE	PT7M8220B28TA5E	PI3C3125WE	PT7C5035BLC-2DE	PI3CH3345LE+C
PT7M8216B28XYE	PT7M8221B28TD5E	PI3C3125QE	PT7C6035ALC-2GDE	PI5PD2560AZEE+C
PT7M8216B30XYE	PT7M8221B28TD3E	PI3C3125LE	PT7C6035ALC-2DE	PI5PD2561AZEE+C
PT7M8216B33XYE	PT7M8221B28TA5E	PI3C3306UE	PT7C5027KC3-2DE	PI5PD2560ZEE+C
PT7M8216B18XYE	PT8A3382ALE	PI3C3305UE	PT7C5027KC3-2WF	PI5PD2561ZEE+C
PT7M8216B20XYE	PT8A3384ALE	PI3C3305LE	PT7C5027KC3-5GDE	PI5C3309UE
PT7M8216B09XZE	PS8A0382ALE	PI3C32X245BE	PT7C5027KC3-5GWF	PI5C3257QE
PT7M8216B10XZE	PS8A0384ALE	PI3C3384QE	PT7C5027KC3-5UWF	PI3CH3305UE+C
PT7M8216B11XZE	PI5A3167CE	PI3C3861-AQE	PT7C5027KC4-2DE	PT8A9011WE
PT7M8216B12XZE	PT8A9000HE	PI5PD2051BTAE	PT7C5027KC4-2WF	PT7M6142NLT4A5E
PT7M8216B25XZE	PT8A9001HE	PT7C4311WE	PT7C5027KC4-5GDE	PT7M6142NLT4A3E
PT7M8216B28XZE	PT8A9002HE	PT7C433833WE	PT7C5027KC4-5GWF	
PT7M8216B30XZE	PT8A2562WE	PT7C433833UE	PT7C5027KC4-5UWF	
PT7M8216B33XZE	PT7C5027C1-5BUWF	PI6ULS5V9306UAE	PT7C5027KC5-2DE	