

## TECHNICAL APPROVAL CERTIFICATE

based on the Agreement on Mutual Recognition  
between the European Community and Canada

## CERTIFICAT D'APPROBATION TECHNIQUE

en se basant l'accord de reconnaissance mutuelle  
entre la Communauté Européenne et le Canada

|   |  |   |
|---|--|---|
| CERTIFICATE NUMBER<br>NUMÉRO DE CERTIFICAT                                      | 14-112206  |   |
| CERTIFICATION NUMBER<br>NUMÉRO DE CERTIFICATION                                 | IC: 6317A-RTL8723BS  |   |
| TYPE OF SERVICE<br>TYPE DE SERVICE  | New Certification (Single)   |   |
| CERTIFICATE HOLDER<br>TITULAIRE DU CERTIFICAT                                   | REALTEK SEMICONDUCTOR CORP.<br>No. 2, Innovation Road II, Hsinchu Science Park,<br>Hsinchu 300, Taiwan |   |
| TYPE OF EQUIPMENT<br>GENRE DE MATÉRIEL  | 802.11b/g/n RTL8723BS Combo module   |   |
| MODEL NUMBER<br>NUMÉRO DE MODELE  | RTL8723BS  |   |
| FREQUENCY RANGE<br>BANDE DE FRÉQUENCES  | 2412-2462 MHz / 2422-2452 MHz<br>2402-2480 MHz   |   |
| EMISSION DESIGNATION (TRC-43)<br>DÉSIGNATION D'ÉMISSION (CRT-43)                | 15M1G1D / 17M9D1D / 36M3D1D<br>924KF1D / 1M20G1D / 1M07F1D   |   |
| R.F. POWER RATING (WATT)<br>PUISSANCE NOMINALE H.F (WATT)                       | 0.0442 W / 0.0422 W / 0.0303 W<br>0.0031 W / 0.0026 W / 0.0032 W                                       |   |
| ANTENNA INFORMATION<br>INFORMATION D'ANTENNE                                    | Please refer to Annex "List of 231 approved antennas"  |   |
| CONTACT INFORMATION OF TESTING LABORATORY<br>COORDONNÉES DU LABORATOIRE D'ESSAI | SPORTON International Inc.<br>No8, Lane 724, Bo-ai Street, Zhubei City,<br>Hsinchu County 302 Taiwan   |   |
| CERTIFIED TO<br>CERTIFIÉ SELON LE   | SPECIFICATION / ISSUE<br>CAHIER DES CHARGES / ÉDITION  | RSS-210 Issue 8, RSS-GEN Issue 3<br>RSS-102 Issue 4 |

Certification of equipment means only that the equipment has met the requirements of the above-noted specification. Licence applications, where applicable to use certified equipment, are acted on accordingly by the Industry Canada issuing office and will depend on the existing radio environment, service and location of operation. This certificate is issued on condition that the holder complies and will continue to comply with the requirements and procedures issued by Industry Canada. The equipment for which this certificate is issued shall not be manufactured, imported, distributed, leased, offered for sale or sold unless the equipment complies with the applicable technical specifications and procedures issued by Industry Canada.

*La certification du matériel signifie seulement que le matériel a satisfait aux exigences de la norme indiquée ci-dessus. Les demandes de licences nécessaires pour l'utilisation du matériel certifié sont traitées en conséquence par le bureau de délivrance d'Industrie Canada et dépendent des conditions radio ambiantes, du service et de l'emplacement d'exploitation. Le présent certificat est délivré à la condition que le titulaire satisfasse et continue de satisfaire aux exigences et aux procédures d'Industrie Canada. Le matériel à l'égard duquel le présent certificat est délivré ne doit pas être fabriqué, importé, distribué, loué, mis en vente ou vendu à moins d'être conforme aux procédures et aux spécifications techniques applicables publiées par Industrie Canada.*

**Labelling of Certified Radio Equipment:** Equipment that has received certification but is not labelled with the model number and the certification number as outlined above is not considered certified.

**Étiquetage du matériel radio homologué:** Le matériel pour lequel une certification a été obtenue mais qui n'est pas étiqueté conformément aux exigences ci-dessus (numéro de modèle et numéro de certification) n'est pas considéré comme certifié.

I hereby attest that the subject equipment was tested and found in compliance with the above-noted specification.

*J'atteste, par la présente, que le matériel a fait l'objet d'essai et a été jugé conforme à la spécification ci-dessus.*

Certification Body Code: DE0003



Bundesnetzagentur

recognised by

  
Signed by / Signataire Alan Lane

Blomberg, 02 May 2014

Foreign Certification Body (FCB)

BNetzA-CAB-04/22-53

LIST OF 231 APPROVED ANTENNAS

| No. | Brand        | Ant. Type | Con. Type | Peak Gain (dBi)          | Model No.  |
|-----|--------------|-----------|-----------|--------------------------|--|
| 1   | LYNwave      | PIFA      | IPEX MHF4 | TX1: 3.5                 | TX1: ALA110-222050-300011                        |
| 2   | FVC          | PIFA      | IPEX      | TX1: 1.58<br>TX2: 1.75   | K05007012102                                     |
| 3   | FVC          | PIFA      | IPEX      | TX1: 2.7<br>TX2: 2.19    | K05007013402                                     |
| 4   | FVC          | PIFA      | IPEX      | TX1: 1.51<br>TX2: 2.04   | K05007012803                                     |
| 5   | FVC          | PIFA      | IPEX      | TX1: 2.53<br>TX2: 2.28   | K05007015501                                     |
| 6   | FVC          | PIFA      | IPEX      | TX1: 2.85<br>TX2: 1.59   | K05007014501                                     |
| 7   | FVC          | PIFA      | IPEX      | TX1: 3.00<br>TX2: 1.52   | K05007014201                                     |
| 8   | FVC          | PIFA      | IPEX      | TX1: 1.85<br>TX2: 1.94   | TX1: K05007014901<br>TX2: K05007015001           |
| 9   | ACON         | PIFA      | IPEX      | TX1: -0.57<br>TX2: -1.61 | TX1: APP6P-700900<br>TX2: APP6P-700900           |
| 10  | JEM          | PIFA      | IPEX      | TX1: 2.23<br>TX2: 2.21   | 1510-0122-0022(IA-120073)                        |
| 11  | WGT          | PIFA      | IPEX      | TX1: 3.2<br>TX2: 2.76    | TX1: SKX51WMPB01+C<br>TX2: SKX51WMPB02+C         |
| 12  | Yageo        | PIFA      | IPEX      | TX1: 0.24<br>TX2: 0.59   | TX1: ANTA0ZP08021WLAN1<br>TX2: ANTA0ZP08021WLAN2 |
| 13  | WGT          | PIFA      | IPEX      | TX1: 1.79<br>TX2: 0.66   | TX1: SK 81WMPB01+A<br>TX2: SK 81WMPB02+A         |
| 14  | WGT          | PIFA      | IPEX      | TX1: 1.36<br>TX2: 2.88   | SKW2UWMPB01+A                                    |
| 15  | WGT          | PIFA      | IPEX      | TX1: 1.85<br>TX2: 3.14   | SKW31WMPB01+A                                    |
| 16  | WGT          | PIFA      | IPEX      | TX1: -1.84<br>TX2: -2.93 | TX1: SKM11WMPB03+A<br>TX2: SKM11WMPB02+D         |
| 17  | WGT          | PIFA      | IPEX      | TX1: 2.46<br>TX2: 2.91   | SKC45WMPB03+B                                    |
| 18  | WGT          | PIFA      | IPEX      | TX1: 1.25<br>TX2: 3.17   | SKW24WMPB01+B                                    |
| 19  | WGT          | PIFA      | IPEX      | TX1: 0.76<br>TX2: 0.09   | TX1: SK555WMPB01+B<br>TX2: SK555WMPB02+B         |
| 20  | ACON         | PIFA      | IPEX      | TX1: 1.94<br>TX2: 1.40   | TX1: DQ60APP6P81<br>TX2: DQ60APP6P80             |
| 21  | HONGLIN      | PIFA      | IPEX      | TX1: -0.50<br>TX2: -0.19 | TX1: DQ602352300<br>TX2: DQ602352200             |
| 22  | Amphenol     | PIFA      | IPEX      | TX1: 1.82<br>TX2: 2.64   | TX1: DC330016100<br>TX2: DC330016110             |
| 23  | Amphenol     | PIFA      | IPEX      | TX1: -0.35<br>TX2: 0.59  | TX1: DC330016180<br>TX2: DC330016190             |
| 24  | Luxshare-ICT | PIFA      | IPEX      | TX1: -0.07<br>TX2: 0.32  | TX1: DC330015Z80<br>TX2: DC330015Z90             |
| 25  | Luxshare-ICT | PIFA      | IPEX      | TX1: -1.45<br>TX2: -0.37 | TX1: DC330015Z00<br>TX2: DC330015Z10             |
| 26  | Amphenol     | PIFA      | IPEX      | TX1: 1.64<br>TX2: 1.47   | TX1: DC330016160<br>TX2: DC330016170             |
| 27  | Luxshare-ICT | PIFA      | IPEX      | TX1: -0.38<br>TX2: -0.60 | TX1: DC330015Z60<br>TX2: DC330015Z70             |
| 28  | Amphenol     | PIFA      | IPEX      | TX1: 1.67<br>TX2: 2.26   | TX1: DC3300161A0<br>TX2: DC3300161B0             |

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| 29 | Luxshare-ICT | PIFA | IPEX | TX1: 1.1<br>TX2: 0.1     | TX1: DC330015ZA0<br>TX2: DC330015ZB0                                     |
| 30 | Amphenol     | PIFA | IPEX | TX1: -0.22<br>TX2: -1.73 | TX1: DC330016200<br>TX2: DC330016210                                     |
| 31 | Amphenol     | PIFA | IPEX | TX1: -2.62<br>TX2: -0.70 | TX1: DC330016220<br>TX2: DC330016230                                     |
| 32 | Luxshare-ICT | PIFA | IPEX | TX1: -0.94<br>TX2: -1.11 | TX1: DC330016020<br>TX2: DC330016030                                     |
| 33 | Luxshare-ICT | PIFA | IPEX | TX1: -4.49<br>TX2: -1.68 | TX1: DC330016000<br>TX2: DC330016010                                     |
| 34 | Amphenol     | PIFA | IPEX | TX1: -0.46<br>TX2: -0.98 | TX1: DC330016260<br>TX2: DC330016270                                     |
| 35 | Luxshare-ICT | PIFA | IPEX | TX1: -0.43<br>TX2: 0.84  | TX1: DC330016060<br>TX2: DC330016070                                     |
| 36 | HIGH-TEK     | PIFA | IPEX | TX1: -0.69<br>TX2: -0.61 | TX1: DC33001C100<br>TX2: DC33001C100                                     |
| 37 | JESS-LINK    | PIFA | IPEX | TX1: -1.90<br>TX2: -0.98 | TX1: DC33001AX00<br>TX2: DC33001AX00                                     |
| 38 | YAGEO        | PIFA | IPEX | TX1: -0.27<br>TX2: -0.88 | TX1: 25.90AH8.021<br>TX2: 25.90AH7.021                                   |
| 39 | ACON         | PIFA | IPEX | TX1: 0.96<br>TX2: 1.33   | TX1: ATP6P-700000<br>TX2: ATP6P-700001                                   |
| 40 | ACON         | PIFA | IPEX | TX1: 1.92<br>TX2: 2.20   | TX1: APP6P-700853<br>TX2: APP6P-700854                                   |
| 41 | ACON         | PIFA | IPEX | TX1: 1.20<br>TX2: 0.11   | APP6P-700931   |
| 42 | WNC          | PIFA | IPEX | TX1: 0.24<br>TX2: -0.58  | TX1: 25.90AH8.001<br>TX2: 25.90AH7.001                                   |
| 43 | ACON         | PIFA | IPEX | TX1: -0.84<br>TX2: -1.60 | APP6P-700932   |
| 44 | WNC          | PIFA | IPEX | TX1: 0.20<br>TX2: -0.60  | 81EAAS15.G01 (DC33001EK00)   |
| 45 | Luxshared    | PIFA | IPEX | TX1: -0.77               | L01RF035-DT-R  |
| 46 | TE           | PIFA | IPEX | TX1: -0.63<br>TX2: -1.69 | TX1: 25.90AC4.011<br>TX2: 25.90AC3.011                                   |
| 47 | WNC          | PIFA | IPEX | TX1: 1.19<br>TX2: -0.14  | TX1: 25.90AC4.001<br>TX2: 25.90AC3.001                                   |
| 48 | WGT          | PIFA | IPEX | TX1: 1.05<br>TX2: -0.41  | TX1: SK110WMPB01+A<br>TX2: SK110WMPB02+A                                 |
| 49 | WGT          | PIFA | IPEX | TX1: -1.61<br>TX2: -2.84 | TX1: SKW23WMPB01+A<br>TX2: SKW23WMPB02+A                                 |
| 50 | WGT          | PIFA | IPEX | TX1: -0.66<br>TX2: 0.78  | TX1: SK547WMPB01+A<br>TX2: SK549WMPB02+A                                 |
| 51 | WGT          | PIFA | IPEX | TX1: -0.93<br>TX2: 0.20  | TX1: SK740WMPB01+A<br>TX2: SK740WMPB02+A                                 |
| 52 | WGT          | PIFA | IPEX | TX1: 3.03<br>TX2: 0.55   | TX1: SK840WMPB01+B_SN<br>TX2: SK840WMPB01+B_SN                           |
| 53 | WNC          | PIFA | IPEX | TX1: -0.26<br>TX2: -0.67 | TX1: 81EAAS15.G02<br>TX2: 81EAAS15.G02                                   |
| 54 | WNC          | PIFA | IPEX | TX1: 0.89<br>TX2: 0.14   | DC33001EK40 (81EAAS15.G05)   |
| 55 | WNC          | PIFA | IPEX | TX1: -0.06<br>TX2: 0.25  | TX1: 81.EL415.G28.X01<br>TX2: 81.EL415.G29.X01                           |
| 56 | TONGDA       | PIFA | IPEX | TX1: -0.57<br>TX2: 0.14  | TX1: T-543-900100-12<br>TX2: T-543-900100-12                             |
| 57 | TONGDA       | PIFA | IPEX | TX1: -1.96<br>TX2: 0.11  | TX1: DC33001F300 / T-543-900100-02<br>TX2: DC33001F300 / T-543-900100-02 |
| 58 | TONGDA       | PIFA | IPEX | TX1: -0.37<br>TX2: 0.39  | TX1: T-543-900100-01<br>TX2: T-543-900100-01                             |

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| 59 | WGT            | PIFA | IPEX | TX1: 0.46<br>TX2: -0.79  | TX1: SKCZTWMPB01+A<br>TX2: SKCZTWMPB02+A                           |
| 60 | WGT            | PIFA | IPEX | TX1: 1.48<br>TX2: 1.15   | TX1: SK670WMPB01+A<br>TX2: SK670WMPB02+A                           |
| 61 | INPAQ          | PIFA | IPEX | TX1: -3.66<br>TX2: -1.78 | TX1: WA- P- LB- 02- 082<br>TX2: WA- P- LB- 01- 046                 |
| 62 | Smart-Approach | PIFA | IPEX | TX1: -4.42<br>TX2: -4.71 | TX1: SE- ECZA0- 001<br>TX2: SE- ECZA0- 002                         |
| 63 | WNC            | PIFA | IPEX | TX1: 0.26<br>TX2: -0.65  | TX1: 81EAAS15.G13<br>TX2: 81EAAS15.G14                             |
| 64 | WNC            | PIFA | IPEX | TX1: 0.01<br>TX2: -0.36  | TX1: 81EAAS15.G09<br>TX2: 81EAAS15.G10                             |
| 65 | ACON           | PIFA | IPEX | TX1: 1.84<br>TX2: 1.05   | TX1: APP6P-700917<br>TX2: APP6P-700918                             |
| 66 | ACON           | PIFA | IPEX | TX1: 0.17<br>TX2: -1.20  | TX1: APP6P-700915<br>TX2: APP6P-700916                             |
| 67 | JEM            | PIFA | IPEX | TX1: 2.13<br>TX2: 2.04   | TX1: IA 120278<br>TX2: IA 120279                                   |
| 68 | JEM            | PIFA | IPEX | TX1: 2.06<br>TX2: 2.77   | IA-120007  |
| 69 | JEM            | PIFA | IPEX | TX1: 1.60<br>TX2: 2.93   | IA-120007  |
| 70 | WGT            | PIFA | IPEX | TX1: 0.76<br>TX2: 0.46   | TX1: SK94SWMPB01+B<br>TX2: SK94SWMPB01+B                           |
| 71 | WGT            | PIFA | IPEX | TX1: 1.32<br>TX2: 1.86   | TX1: SK94TWMPB01+B<br>TX2: SK94TWMPB01+B                           |
| 72 | WGT            | PIFA | IPEX | TX1: -0.03<br>TX2: -0.13 | TX1: SK50SWMPB01+A<br>TX2: SK50SWMPB02+A                           |
| 73 | ACON           | PIFA | IPEX | TX1: 0.84<br>TX2: -0.27  | TX1: APM8P-700072<br>TX2: APM8P-700073                             |
| 74 | ACON           | PIFA | IPEX | TX1: 0.76<br>TX2: -0.52  | TX1: APP8P-700461<br>TX2: APP8P-700462                             |
| 75 | ACON           | PIFA | IPEX | TX1: 1.74<br>TX2: 1.01   | TX1: APM8P-700070<br>TX2: APM8P-700071                             |
| 76 | ACON           | PIFA | IPEX | TX1: 2.92<br>TX2: 0.06   | TX1: APP8P-700463<br>TX2: APP8P-700464                             |
| 77 | HongLin        | PIFA | IPEX | TX1: -0.8<br>TX2: 0.72   | TX1: 260-24018<br>TX2: 260-24017                                   |
| 78 | WNC            | PIFA | IPEX | TX1: -0.85<br>TX2: -0.51 | TX1: DC33001CA20 (81.EK515.G52)<br>TX2: DC33001CA30 (81.EK515.G53) |
| 79 | ACON           | PIFA | IPEX | TX1: 0.82<br>TX2: 2.07   | TX1: APP8P-700473<br>TX2: APP8P-700474                             |
| 80 | HongLin        | PIFA | IPEX | TX1: 1.88<br>TX2: 1.31   | TX1: 260-24016<br>TX2: 260-24015                                   |
| 81 | HongLin        | PIFA | IPEX | TX1: 0.87<br>TX2: -0.53  | TX1: 260-24011<br>TX2: 260-24010                                   |
| 82 | HongLin        | PIFA | IPEX | TX1: 0.34<br>TX2: 1.98   | TX1: 260-24013<br>TX2: 260-24012                                   |
| 83 | HongLin        | PIFA | IPEX | TX1: 1.92<br>TX2: -0.14  | TX1: 260-24001<br>TX2: 260-24000                                   |
| 84 | HongLin        | PIFA | IPEX | TX1: 1.85<br>TX2: 0.94   | TX1: 260-24003<br>TX2: 260-24002                                   |
| 85 | Smart Approach | PIFA | IPEX | TX1: 0.37<br>TX2: 1.35   | TX1: SE-ECWGP-001<br>TX2: SE-ECWGP-002                             |
| 86 | Smart Approach | PIFA | IPEX | TX1: 0.08<br>TX2: 1.33   | TX1: SE-ECLG2-001<br>TX2: SE-ECLG2-002                             |
| 87 | Smart Approach | PIFA | IPEX | TX1: 1.19<br>TX2: 1.54   | TX1: SE-ECWGR-001<br>TX2: SE-ECWGR-002                             |

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| 88  | Smart Approach | PIFA | IPEX | TX1: -0.04<br>TX2: 1.10  | TX1: SE-ECLG1-001<br>TX2: SE-ECLG1-002   |
| 89  | WNC            | PIFA | IPEX | TX1: 0.45<br>TX2: 1.06   | TX1: 81.EK515.G36<br>TX2: 81.EK515.G37   |
| 90  | WNC            | PIFA | IPEX | TX1: -0.90<br>TX2: -2.06 | TX1: DC33001CA00 (81.EK515.G46)<br>TX2: DC33001CA10 (81.EK515.G47)             |
| 91  | WNC            | PIFA | IPEX | TX1: 0.77<br>TX2: 0.11   | TX1: 81.EK515.G38<br>TX2: 81.EK515.G39   |
| 92  | WNC            | PIFA | IPEX | TX1: -0.20<br>TX2: -1.54 | TX1: DC33001CC00 (81.EK515.G48)<br>TX2: DC33001CC10 (81.EK515.G49)             |
| 93  | JEM            | PIFA | IPEX | TX1: 2.77<br>TX2: 3.13   | TX1: IA-130306<br>TX2: IA-130307   |
| 94  | JEM            | PIFA | IPEX | TX1: 2.09<br>TX2: 1.77   | TX1: IA-130082<br>TX2: IA-130083   |
| 95  | JEM            | PIFA | IPEX | TX1: 1.68<br>TX2: 1.52   | TX1: IA-130086 (13B130-FT2070)<br>TX2: IA-130087 (13B130-FT2071)               |
| 96  | JEM            | PIFA | IPEX | TX1: 2.13<br>TX2: 1.85   | TX1: IA-130086 (13B130-FT2070)<br>TX2: IA-130087 (13B130-FT2071)               |
| 97  | WGT            | PIFA | IPEX | TX1: 2.81<br>TX2: 1.92   | TX1: EGTZ2WIPB01+A (13B130-JV3051 ES)<br>TX2: EGTZ2WIPB02+A (13B130-JV3050 ES) |
| 98  | WGT            | PIFA | IPEX | TX1: 2.5<br>TX2: 1.65    | TX1: EGS45WIPB02+A (13B130-FT2050)<br>TX2: EGS45WIPB01+A (13B130-FT2051)       |
| 99  | WGT            | PIFA | IPEX | TX1: -3.11<br>TX2: 1.46  | TX1: EGS45WIPB02+A (13B130-FT2050)<br>TX2: EGS45WIPB01+A (13B130-FT2051)       |
| 100 | Luxshare       | PIFA | IPEX | TX1: -1.45<br>TX2: 0.11  | TX1: L01RF024-YT-R<br>TX2: L01RF032-YT-R                                       |
| 101 | Luxshare       | PIFA | IPEX | TX1: 2.51<br>TX2: 0.14   | TX1: L01RF031-DT-R<br>TX2: L01RF013-R  |
| 102 | Luxshare       | PIFA | IPEX | TX1: 2.51<br>TX2: -0.14  | TX1: L01RF031-DT-R<br>TX2: L01RF014-R  |
| 103 | Luxshare       | PIFA | IPEX | TX1: 2.51<br>TX2: -0.04  | TX1: L01RF031-DT-R<br>TX2: L01RF022-DT-R                                       |
| 104 | Luxshare       | PIFA | IPEX | TX1: 2.51<br>TX2: 2.51   | TX1: L01RF031-DT-R<br>TX2: L01RF031-DT-R                                       |
| 105 | JEM            | PIFA | IPEX | TX1: 2.64<br>TX2: -0.19  | TX1: IA-130096<br>TX2: IA-130096   |
| 106 | JEM            | PIFA | IPEX | TX1: 2.03<br>TX2: -1.19  | TX1: IA-130173<br>TX2: IA-130173   |
| 107 | JEM            | PIFA | IPEX | TX1: 1.05<br>TX2: -1.60  | TX1: IA-130313<br>TX2: IA-130313   |
| 108 | JEM            | PIFA | IPEX | TX1: 2.57<br>TX2: 1.55   | TX1: IA-130314<br>TX2: IA-130314   |
| 109 | Smart Approach | PIFA | IPEX | TX1: -0.27<br>TX2: 0.85  | TX1: SE-ECWU6-001<br>TX2: SE-ECWU6-001   |
| 110 | Smart Approach | PIFA | IPEX | TX1: 0.22<br>TX2: 0.94   | TX1: SE-ECWF5-001<br>TX2: SE-ECWF5-001   |
| 111 | Yageo          | PIFA | IPEX | TX1: -0.12<br>TX2: -1.03 | TX1: CAN4313NC0753LLB1<br>TX2: CAN4313NC0753LLB1                               |
| 112 | Smart Approach | PIFA | IPEX | TX1: -0.57<br>TX2: 1.13  | TX1: SE-ECWF5-002<br>TX2: SE-ECWF5-002   |
| 113 | Yageo          | PIFA | IPEX | TX1: 1.13<br>TX2: -0.03  | TX1: CAN4313NC0753LLB2<br>TX2: CAN4313NC0753LLB2                               |
| 114 | Hong-Lin       | PIFA | IPEX | TX1: 2.85<br>TX2: 0.43   | TX1: 260-23557<br>TX2: 260-23556   |
| 115 | ACON           | PIFA | IPEX | TX1: 0.17<br>TX2: -1.20  | TX1: APP6Y-700000<br>TX2: APP6Y-700001   |
| 116 | ACON           | PIFA | IPEX | TX1: 1.84<br>TX2: 1.05   | TX1: APP6Y-700002<br>TX2: APP6Y-700003   |
| 117 | WNC            | PIFA | IPEX | TX1: 0.01<br>TX2: -0.36  | TX1: 81EAAS15.G19<br>TX2: 81EAAS15.G20   |



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| 118 | WNC            | PIFA | IPEX | TX1: 0.26<br>TX2: -0.65  | TX1: 81EAAS15.G17<br>TX2: 81EAAS15.G18   |
| 119 | ACON           | PIFA | IPEX | TX1: 0.32<br>TX2: 0.53   | TX1: 25.90ALM.001<br>(AMM8P-700026)<br>TX2: 25.90ALN.001 (AMM8P-700027)        |
| 120 | INNOWAVE       | PIFA | IPEX | TX1: 0.77<br>TX2: -0.62  | TX1: 25.90ALO.001 (640-INNEP0008-A)<br>TX2: 25.90ALP.001 (640-INNEP0007-A)     |
| 121 | ACON           | PIFA | IPEX | TX1: 1.73<br>TX2: 1.47   | TX1: AMM6P-700025 (25.90AL4.001)<br>TX2: AMM6P-700026 (25.90AL5.001)           |
| 122 | INNOWAVE       | PIFA | IPEX | TX1: 0.54<br>TX2: 1.79   | TX1: 25.90AL7.001 (640-INNEP0005-A)<br>TX2: 25.90AL8.001 (640-INNEP0006-A)     |
| 123 | Foxconn        | PIFA | IPEX | TX1: -4.13<br>TX2: -2.85 | TX1: DQ608300300<br>TX2: DQ608300300   |
| 124 | WGT            | PIFA | IPEX | TX1: 1.32<br>TX2: 1.86   | TX1: SK94TWMPB01+D<br>TX2: SK94TWMPB01+D                                       |
| 125 | HONGLIN        | PIFA | IPEX | TX1: 0.64<br>TX2: 2.01   | TX1: 260-24032<br>TX2: 260-24031   |
| 126 | TONGDA         | PIFA | IPEX | TX1: 1.95<br>TX2: 0.96   | TX1: DC33001GR00 / T-543-9021004-1<br>TX2: DC33001GR10 / T-543-9021004-2       |
| 127 | INPAQ          | PIFA | IPEX | TX1: -3.18<br>TX2: -0.93 | TX1: WA-P-LB-02-088<br>TX2: WA-P-LB-01-049                                     |
| 128 | Smart-Approach | PIFA | IPEX | TX1: -0.23<br>TX2: -2.93 | TX1: SE-ECSA0-001<br>TX2: SE-ECSA0-002   |
| 129 | Auden          | PIFA | IPEX | TX1: -0.02<br>TX2: 2.03  | TX1: BAUK01063-WIFI-L<br>TX2: BAUK01063-WIFI-R                                 |
| 130 | INPAQ          | PIFA | IPEX | TX1: -0.11<br>TX2: 1.00  | TX1: WA-P-LB-10-015-L<br>TX2: WA-P-LB-10-015-R                                 |
| 131 | JEM            | PIFA | IPEX | TX1: 0.08<br>TX2: 1.07   | TX1: IA-130361<br>TX2: IA-130362   |
| 132 | JEM            | PIFA | IPEX | TX1: 2.63<br>TX2: 0.19   | TX1: IA-130157 (13B130-FU4070)<br>TX2: IA-130158 (13B130-FU4071)               |
| 133 | WGT            | PIFA | IPEX | TX1: 2.82<br>TX2: 1.57   | TX1: EGC10WIPB01+A (13B130-FS8050)<br>TX2: EGC10WIPB02+A (13B130-FS8051)       |
| 134 | WGT            | PIFA | IPEX | TX1: 3.38<br>TX2: 3.28   | TX1: EG10MWIPB01+A (13B130-FU4051 ES)<br>TX2: EG10MWIPB02+A (13B130-FU4050 ES) |
| 135 | WNC            | PIFA | IPEX | TX1: 2.75<br>TX2: 1.79   | TX1: 81.EEW.15.GAF (25.90AEM.001)<br>TX2: 81.EEW.15.GAG (25.90AEN.001)         |
| 136 | ACON           | PIFA | IPEX | TX1: -0.21<br>TX2: -0.82 | TX1: AMM6P-700041 (025.9001G.0001)<br>TX2: AMM8P-700031 (025.9001H.0001)       |
| 137 | INNOWAVE       | PIFA | IPEX | TX1: 1.58<br>TX2: 0.51   | TX1: 640-INNEP0036-A (025.9001I.0001)<br>TX2: 640-INNEP0037-A (025.9001J.0001) |
| 138 | LUXSHARE       | PIFA | IPEX | TX1: 1.27<br>TX2: -0.1   | TX1: DC330017L00<br>TX2: DC330017L10   |
| 139 | Speed          | PIFA | IPEX | TX1: 0.23<br>TX2: 1.25   | TX1: DC330017G00<br>TX2: DC330017G10   |
| 140 | LUXSHARE       | PIFA | IPEX | TX1: 1.60<br>TX2: 0.84   | TX1: DC330017M00<br>TX2: DC330017M10   |
| 141 | Speed          | PIFA | IPEX | TX1: 1.87<br>TX2: 2.85   | TX1: DC330017J00<br>TX2: DC330017J10   |
| 142 | WNC            | PIFA | IPEX | TX1: 1.55<br>TX2: 0.76   | TX1: 81.EKU15.G59<br>TX2: 81.EKU15.G60   |
| 143 | TONGDA         | PIFA | IPEX | TX1: -0.23<br>TX2: 0.83  | TX1: T-543-9021015-1<br>TX2: T-543-9021015-2                                   |
| 144 | ACON           | PIFA | IPEX | TX1: -0.7<br>TX2: -1.85  | TX1: APP6Y-700015<br>TX2: APP6Y-700016   |
| 145 | Smart Approach | PIFA | IPEX | TX1: 1.33<br>TX2: 1.13   | TX1: SE-ECB14-001<br>TX2: SE-ECB14-002   |
| 146 | HONGLIN        | PIFA | IPEX | TX1: -1.15<br>TX2: 0.42  | TX1: 260-24034<br>TX2: 260-24033   |

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| 147 | Speed          | PIFA | IPEX | TX1: -0.09<br>TX2: -2.17 | TX1: F.0G.FH-6004-001<br>TX2: F.0G.FH-6004-002                                 |
| 148 | WNC            | PIFA | IPEX | TX1: 1.91<br>TX2: 1.72   | TX1: 81.EKU15.G61<br>TX2: 81.EKU15.G62   |
| 149 | WNC            | PIFA | IPEX | TX1: 0.49<br>TX2: 1.30   | TX1: 81.EKU15.G55<br>TX2: 81.EKU15.G56   |
| 150 | TONGDA         | PIFA | IPEX | TX1: 1.86<br>TX2: -0.25  | TX1: T-543-9021017-1<br>TX2: T-543-9021017-2                                   |
| 151 | Smart approach | PIFA | IPEX | TX1: 0.19<br>TX2: 0.75   | TX1: SE-ECB15-001<br>TX2: SE-ECB15-002   |
| 152 | ACON           | PIFA | IPEX | TX1: 0.47<br>TX2: 1      | TX1: APP6Y-700021<br>TX2: APP6Y-700022   |
| 153 | HONGLIN        | PIFA | IPEX | TX1: 0.53<br>TX2: 1.75   | TX1: 260-24036<br>TX2: 260-24035   |
| 154 | Speed          | PIFA | IPEX | TX1: -0.96<br>TX2: -0.32 | TX1: F.0G.FH-6005-001<br>TX2: F.0G.FH-6005-002                                 |
| 155 | WNC            | PIFA | IPEX | TX1: 1.91<br>TX2: 1.97   | TX1: 81.EKU15.G57<br>TX2: 81.EKU15.G58   |
| 156 | WNC            | PIFA | IPEX | TX1: 1.94<br>TX2: 0.62   | TX1: 81.EKU15.G53<br>TX2: 81.EKU15.G54   |
| 157 | TONGDA         | PIFA | IPEX | TX1: 1.95<br>TX2: 0.36   | TX1: T-543-9021010-1<br>TX2: T-543-9021010-2                                   |
| 158 | Smart approach | PIFA | IPEX | TX1: 0.30<br>TX2: 1.02   | TX1: SE-ECWE0-001<br>TX2: SE-ECWE0-002   |
| 159 | ACON           | PIFA | IPEX | TX1: 0.27<br>TX2: 1.34   | TX1: APP6Y-700019<br>TX2: APP6Y-700020   |
| 160 | HIGH-TEK       | PIFA | IPEX | TX1: 1.19<br>TX2: 0.3    | TX1: 0ACCN013035N<br>TX2: 0ACCN013035N   |
| 161 | Smart approach | PIFA | IPEX | TX1: 0.61<br>TX2: 1.29   | TX1: SE-ECVY1-001<br>TX2: SE-ECVY1-001   |
| 162 | Smart approach | PIFA | IPEX | TX1: 1.80<br>TX2: -3.13  | TX1: SE-ECVY2-001<br>TX2: SE-ECVY2-001   |
| 163 | TONGDA         | PIFA | IPEX | TX1: 1.98<br>TX2: 1.85   | TX1: T-543-9021012-A<br>TX2: T-543-9021012-A                                   |
| 164 | HIGH-TEK       | PIFA | IPEX | TX1: -0.07<br>TX2: -1.81 | TX1: 0ACCN013036<br>TX2: 0ACCN013036   |
| 165 | Zhan yun       | PIFA | IPEX | TX1: 1.16<br>TX2: 1.31   | TX1: QTFF6-EQL0202A<br>TX2: QTFF6-EQL0202A                                     |
| 166 | Zhan yun       | PIFA | IPEX | TX1: 0.34<br>TX2: 0.56   | TX1: QTFF6-EQL0102A<br>TX2: QTFF6-EQL0102A                                     |
| 167 | VSO            | PIFA | IPEX | TX1: 2.07<br>TX2: 0.39   | TX1: 821-101-01211090<br>TX2: 821-101-01211100                                 |
| 168 | Hong-Lin       | PIFA | IPEX | TX1: 2.85<br>TX2: 0.43   | TX1: 260-23557<br>TX2: 260-23556   |
| 169 | HIGH-TEK       | PIFA | IPEX | TX1: -0.87<br>TX2: 0.77  | TX1: 025.9002N.0011<br>TX2: 025.9002M.0011                                     |
| 170 | WNC            | PIFA | IPEX | TX1: 0.33<br>TX2: 1.03   | TX1: 025.9002N.0001<br>TX2: 025.9002M.0001                                     |
| 171 | HIGH-TEK       | PIFA | IPEX | TX1: -0.6<br>TX2: -1.54  | TX1: 025.90027.0011<br>TX2: 025.90026.0011                                     |
| 172 | WNC            | PIFA | IPEX | TX1: -1.09<br>TX2: 0.62  | TX1: 025.90027.0001<br>TX2: 025.90026.0001                                     |
| 173 | INNOWAVE       | PIFA | IPEX | TX1: -1.17<br>TX2: 1.63  | TX1: 025.90019.0001 (640-INNEP0030-A)<br>TX2: 025.9001A.0001 (640-INNEP0031-A) |
| 174 | WNC            | PIFA | IPEX | TX1: 0.82<br>TX2: 0.49   | TX1: 025.90017.0001 (81.EEW15.GEL)<br>TX2: 025.90018.0001 (81.EEW15.GEM)       |
| 175 | WGT            | PIFA | IPEX | TX1: -0.93<br>TX2: -0.36 | TX1: SK970WIPB01+A<br>TX2: SK970WIPB02+A                                       |
| 176 | TONGDA         | PIFA | IPEX | TX1: 1.98<br>TX2: 1.91   | TX1: T-543-9021011-A<br>TX2: T-543-9021011-A                                   |

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| 177 | Foxconn        | PIFA | IPEX | TX1: 2.27<br>TX2: 1.14   | TX1: 79011HU00-600-G<br>TX2: 79011HU00-600-G                                 |
| 178 | Yageo          | PIFA | IPEX | TX1: 1.06                | TX1: DQ600856200/ ANTA0HQ08562WLGP4  |
| 179 | Foxconn        | PIFA | IPEX | TX1: -0.57<br>TX2: -0.97 | TX1: DQ6V5NS3300 (WDAN-HQV5NS33-DH)<br>TX2: DQ6V5NS3300 (WDAN-HQV5NS33-DH)   |
| 180 | Foxconn        | PIFA | IPEX | TX1: -0.07               | TX1: DQ6V5NS3100 (WDAN-HQV5NS31-DH)  |
| 181 | Foxconn        | PIFA | IPEX | TX1: 0.30<br>TX2: -0.18  | TX1: DQ6V5TS3300 (WDAN-HQV5TS33-DH)<br>TX2: DQ6V5TS3300 (WDAN-HQV5TS33-DH)   |
| 182 | Foxconn        | PIFA | IPEX | TX1: 2.25                | TX1: DQ6V5TS3100 (WDAN-HQV5TS31-DH)  |
| 183 | Foxconn        | PIFA | IPEX | TX1: 0.48<br>TX2: -0.69  | TX1: DQ6V7NS3300 (WDAN-HQV7NS33-DH)<br>TX2: DQ6V7NS3300 (WDAN-HQV7NS33-DH)   |
| 184 | Foxconn        | PIFA | IPEX | TX1: -0.89               | TX1: DQ6V7NS3100 (WDAN-HQV7NS31-DH)  |
| 185 | Foxconn        | PIFA | IPEX | TX1: 2.34                | TX1: DQ6V7TS3100 (WDAN-HQV7TS31-DH)  |
| 186 | Foxconn        | PIFA | IPEX | TX1: 1.44<br>TX2: 1.04   | TX1: DQ6V4NS3300 (WDAN-HQV4NS33-DH)<br>TX2: DQ6V4NS3300 (WDAN-HQV4NS33-DH)   |
| 187 | Foxconn        | PIFA | IPEX | TX1: -0.93               | TX1: DQ6V4NS3100 (WDAN-HQV4NS31-DH)  |
| 188 | Foxconn        | PIFA | IPEX | TX1: 1.25<br>TX2: 3.36   | TX1: DQ6V4TS3300 (WDAN-HQV4TS33-DH)<br>TX2: DQ6V4TS3300 (WDAN-HQV4TS33-DH)   |
| 189 | Foxconn        | PIFA | IPEX | TX1: 2.39                | TX1: DQ6V4TS3100 (WDAN-HQV4TS31-DH)  |
| 190 | Foxconn        | PIFA | IPEX | TX1: -0.52<br>TX2: 2.89  | TX1: DQ6V7TS3300 (WDAN-HQV7TS33-DH)<br>TX2: DQ6V7TS3300 (WDAN-HQV7TS33-DH)   |
| 191 | JESS-LINK      | PIFA | IPEX | TX1: -0.97<br>TX2: -1.03 | TX1: DQ613A00032 (PANT13A00008-6)<br>TX2: DQ613A00032 (PANT13A00008-6)       |
| 192 | JESS-LINK      | PIFA | IPEX | TX1: -0.03               | TX1: DQ613A00033 (PANT13A00007-9)  |
| 193 | JESS-LINK      | PIFA | IPEX | TX1: -1.46<br>TX2: -0.43 | TX1: DQ613A00024 (PANT13A00008-8)<br>TX2: DQ613A00024 (PANT13A00008-8)       |
| 194 | JESS-LINK      | PIFA | IPEX | TX1: 0.29                | TX1: DQ613A00025 (PANT13A00008-2)  |
| 195 | JESS-LINK      | PIFA | IPEX | TX1: -0.40<br>TX2: 0.40  | TX1: DQ613A00028 (PANT13A00008-4)<br>TX2: DQ613A00028 (PANT13A00008-4)       |
| 196 | JESS-LINK      | PIFA | IPEX | TX1: 0.93                | TX1: DQ613A00029 (PANT13A00007-7)  |
| 197 | TONGDA         | PIFA | IPEX | TX1: 0.04<br>TX2: -1.22  | TX1: DC33001H800 / T-543-9001008-1<br>TX2: DC33001H810 / T-543-9001008-2     |
| 198 | WNC            | PIFA | IPEX | TX1: -0.02<br>TX2: 2.24  | TX1: DC33001H900 / 81EAAK15.GCC<br>TX2: DC33001H910 / 81EAAK15.GCD           |
| 199 | Yageo          | PIFA | IPEX | TX1: 0.67<br>TX2: -0.83  | TX1: DC33001HB00 / ANTA0HC08231WLAN1<br>TX2: DC33001HB10 / ANTA0HC08231WLAN2 |
| 200 | ACON           | PIFA | IPEX | TX1: -1.36<br>TX2: -1.53 | TX1: 6036B0110902 (APP8P-700479)<br>TX2: 6036B0111002 (APP8P-700480)         |
| 201 | WNC            | PIFA | IPEX | TX1: -0.75<br>TX2: 1.05  | TX1: 6036B0110901 (81EAAK15.G66)<br>TX2: 6036B0111001 (81EAAK15.G67)         |
| 202 | Smart Approach | PIFA | IPEX | TX1: 0.93<br>TX2: -0.55  | TX1: DC33001HF00/ SE-ECS41-001<br>TX2: DC33001HF10/ SE-ECS41-002             |
| 203 | TONGDA         | PIFA | IPEX | TX1: 0.74<br>TX2: -0.07  | TX1: DC33001HE00 / T-543-9001007-1<br>TX2: DC33001HE10 / T-543-9001007-2     |
| 204 | WNC            | PIFA | IPEX | TX1: 0.39<br>TX2: 0.27   | TX1: DC33001HD00/ 81EAAK15.GCA<br>TX2: DC33001HD10/ 81EAAK15.GCB             |
| 205 | SIMYA          | PIFA | IPEX | TX1: 1.30<br>TX2: -0.65  | TX1: DQ601001400<br>TX2: DQ601001400   |
| 206 | SIMYA          | PIFA | IPEX | TX1: 0.72                | TX1: DQ601001500   |
| 207 | SIMYA          | PIFA | IPEX | TX1: -1.82<br>TX2: 1.86  | TX1: DQ601001200<br>TX2: DQ601001200   |
| 208 | SIMYA          | PIFA | IPEX | TX1: 1.27                | TX1: DQ601001300   |



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| 209 | SIMYA          | PIFA | IPEX | TX1: 2.23<br>TX2: 1.38   | TX1: DQ601001800<br>TX2: DQ601001800                               |
| 210 | SIMYA          | PIFA | IPEX | TX1: 0.18                | TX1: DQ601001900   |
| 211 | SIMYA          | PIFA | IPEX | TX1: 2.23                | TX1: DQ601001700   |
| 212 | SIMYA          | PIFA | IPEX | TX1: 0.04<br>TX2: 0.38   | TX1: DQ601001000<br>TX2: DQ601001000                               |
| 213 | SIMYA          | PIFA | IPEX | TX1: 1.60                | TX1: DQ601001100   |
| 214 | SIMYA          | PIFA | IPEX | TX1: -0.79<br>TX2: 1.62  | TX1: DQ601000800<br>TX2: DQ601000800                               |
| 215 | SIMYA          | PIFA | IPEX | TX1: 2.20                | TX1: DQ601000900   |
| 216 | ACON           | PIFA | IPEX | TX1: 0.51                | TX1: 6036B0121903 (APP6P-701022)                                   |
| 217 | Smart Approach | PIFA | IPEX | TX1: -0.55               | TX1: 6036B0121901 (SE-EISW4-001)                                   |
| 218 | SIMYA          | PIFA | IPEX | TX1: 2.23<br>TX2: 1.38   | TX1: DQ601001600<br>TX2: DQ601001600                               |
| 219 | WNC            | PIFA | IPEX | TX1: 2.59                | TX1: DQ6R15G1000 (81EAAR15.G10)                                    |
| 220 | WNC            | PIFA | IPEX | TX1: 0.83                | TX1: DQ6R15G5400 (81EAAR15.G54)                                    |
| 221 | WNC            | PIFA | IPEX | TX1: -0.14<br>TX2: -0.24 | TX1: DQ6R15G1100 (81EAAR15.G11)<br>TX2: DQ6R15G1100 (81EAAR15.G11) |
| 222 | WNC            | PIFA | IPEX | TX1: -0.67               | TX1: DQ6R15G1200 (81EAAR15.G12)                                    |
| 223 | WNC            | PIFA | IPEX | TX1: -0.23<br>TX2: 0.96  | TX1: DQ6R15G1300 (81EAAR15.G13)<br>TX2: DQ6R15G1300 (81EAAR15.G13) |
| 224 | WNC            | PIFA | IPEX | TX1: 1.22                | TX1: DQ6R15G1400 (81EAAR15.G14)                                    |
| 225 | WNC            | PIFA | IPEX | TX1: 1.29<br>TX2: 1.99   | TX1: DQ6R15G1500 (81EAAR15.G15)<br>TX2: DQ6R15G1500 (81EAAR15.G15) |
| 226 | WNC            | PIFA | IPEX | TX1: 1.52                | TX1: DQ6R15G1600 (81EAAR15.G16)                                    |
| 227 | WNC            | PIFA | IPEX | TX1: -0.91<br>TX2: 1.99  | TX1: DQ6R15G1700 (81EAAR15.G17)<br>TX2: DQ6R15G1700 (81EAAR15.G17) |
| 228 | WNC            | PIFA | IPEX | TX1: 2.45                | TX1: DQ6R15G1800 (81EAAR15.G18)                                    |
| 229 | WNC            | PIFA | IPEX | TX1: 0.80<br>TX2: 0.01   | TX1: DQ6R15G5600 (81EAAR15.G56)<br>TX2: DQ6R15G5600 (81EAAR15.G56) |
| 230 | WNC            | PIFA | IPEX | TX1: 2.33                | TX1: DQ6R15G5700 (81EAAR15.G57)                                    |
| 231 | WNC            | PIFA | IPEX | TX1: 0.46<br>TX2: 2.13   | TX1: DQ6R15G0900 (81EAAR15.G09)<br>TX2: DQ6R15G0900 (81EAAR15.G09) |