Testing Laboratory 3787

RADIO TEST REPORT

Equipment	:	11ax RTL8852CE Combo module
Brand Name	:	REALTEK
Model Name	:	RTL8852CE
Applicant	:	Realtek Semiconductor Corp. No. 2,Innovation Road II, Hsinchu Science Park, Hsinchu 300,Taiwan
Manufacturer	:	Realtek Semiconductor Corp. No. 2,Innovation Road II, Hsinchu Science Park, Hsinchu 300,Taiwan
Standard	:	MIC Certification Rule, Article 2 Paragraph 1 Item 19 MIC Certification Rule, Article 2 Paragraph 1 Item 19-3 MIC Certification Rule, Article 2 Paragraph 1 of Item 79 MIC Certification Rule, Article 2 Paragraph 1 of Item 80

We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in MIC Notice No.88 Appendix No.43, No.44, [Test method temporarily determined by TELEC], 6 GHz band low power data communication system (DSPR) and shown compliance with the applicable MIC Ordinance Regulating Radio Equipment Article 49.20, MIC Certification Rule, Article 2 Paragraph 1 of Item 79 and MIC Certification Rule, Article 2 Paragraph 1 of Item 80 technical standards.

The test results in this variant report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Hsinchu Laboratory, the test report shall not be reproduced except in full.

Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory
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History of this test report

Report No.	Version	Description	Issued Date
JR1N0223-42	01	Initial issue of report	Nov. 30, 2023

Summary of Test Result

Disclaimer:
The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Sam Chen
Report Producer: Cathy Chiu

1 General Description

1.1 Information

1.1.1 RF General Information

<For WLAN 2.4GHz CH1~13>

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
2400-2483.5	b, g, n (HT20), VHT20, ax (HEW20)	2412-2472	1-13 [13]
2400-2483.5	n (HT40), VHT40, ax (HEW40)	2422-2462	3-11 [9]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	1TX/2TX
2.4-2.4835GHz	802.11g	20	1TX/2TX
2.4-2.4835GHz	802.11n HT20	20	1TX/2TX
2.4-2.4835GHz	VHT20	20	1TX/2TX
2.4-2.4835GHz	802.11ax HEW20	20	1TX/2TX
2.4-2.4835GHz	802.11n HT40	40	1TX/2TX
2.4-2.4835GHz	VHT40	40	1TX/2TX
2.4-2.4835GHz	802.11ax HEW40	40	1TX/2TX

Note:
- 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- 11g, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- VHT20, VHT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- HEW20, HEW40 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- BWch is the nominal channel bandwidth.

<For WLAN 2.4GHz CH14>

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
2471-2497	b	2484	14 [1]

Band	Mode	BWch (MHz)	Nant
2.471-2.497GHz	11b	20	1TX/2TX

Note:
- 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- BWch is the nominal channel bandwidth.

<For Bluetooth BR / EDR>

Frequency Range (MHz)	Bluetooth Version	Ch. Frequency (MHz)	Channel Number
2400-2483.5	BR / EDR	2402-2480	0-78 [79]

Band	Mode	Nant
2.4-2.4835GHz	BT-BR	1TX
2.4-2.4835GHz	BT-EDR	1TX

Note:
- Bluetooth BR uses a GFSK (1Mbps).
- Bluetooth EDR uses a combination of π/4-DQPSK (2Mbps) and 8DPSK (3Mbps).
- Bluetooth BR/EDR uses as a system using FHSS modulation.
- BWch is the nominal channel bandwidth.

<For Bluetooth LE>

Frequency Range (MHz)	Bluetooth Mode	Ch. Frequency (MHz)	Channel Number
2400-2483.5	LE (1Mbps) – v4.x	2402-2480	0-39 [40]
2400-2483.5	LE (1Mbps, 500Kb/s, 125Kb/s) – v5.x	2402, 2426, 2480	0, 12, 39 [3]
2400-2483.5	LE (2Mbps) – v5.x	2404-2478 (Without 2426 MHz)	1-38 [37]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	BT-LE(1Mbps)	1.0	1TX
2.4-2.4835GHz	BT-LE(500Kb/s)	1.0	1TX
2.4-2.4835GHz	BT-LE(125Kb/s)	1.0	1TX
2.4-2.4835GHz	BT-LE(2Mbps)	2.0	1TX

Note:
- Bluetooth LE uses a GFSK modulation.
- BWch is the nominal channel bandwidth.

<For WLAN 5GHz>

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20), ax (HEW20)	5180-5240	36-48 [4]
5250-5350		5260-5320	52-64 [4]
5470-5730		5500-5720	100-144 [12]
5150-5250	n (HT40), ac (VHT40), ax (HEW40)	5190-5230	38-46 [2]
5250-5350		5270-5310	54-62 [2]
5470-5730		5510-5710	102-142 [6]
5150-5250	ac (VHT80), ax (HEW80)	5210	42 [1]
5250-5350		5290	58 [1]
5470-5730		5530-5690	106-138 [3]
5150-5350	ac (VHT160), ax (HEW160)	5250	50 [1]
5470-5730		5570	114 [1]

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	1TX/2TX
5.15-5.25GHz	802.11n HT20	20	1TX/2TX
5.15-5.25GHz	802.11ac VHT20	20	1TX/2TX
5.15-5.25GHz	802.11ax HEW20	20	1TX/2TX
5.15-5.25GHz	802.11n HT40	40	1TX/2TX
5.15-5.25GHz	802.11ac VHT40	40	1TX/2TX
5.15-5.25GHz	802.11ax HEW40	40	1TX/2TX
5.15-5.25GHz	802.11ac VHT 80	80	1TX/2TX
5.15-5.25GHz	802.11ax HEW 80	80	1TX/2TX
5.25-5.35GHz	802.11a	20	1TX/2TX
5.25-5.35GHz	802.11n HT20	20	1TX/2TX
5.25-5.35GHz	802.11ac VHT20	20	1TX/2TX
5.25-5.35GHz	802.11ax HEW20	20	1TX/2TX
5.25-5.35GHz	802.11n HT40	40	1TX/2TX
5.25-5.35GHz	802.11ac VHT40	40	1TX/2TX
5.25-5.35GHz	802.11ax HEW40	40	1TX/2TX
5.25-5.35GHz	802.11ac VHT 80	80	1TX/2TX
5.25-5.35GHz	802.11ax HEW 80	80	1TX/2TX
5.15-5.35GHz	802.11ac VHT160	160	1TX/2TX
5.15-5.35GHz	802.11ax HEW 160	160	1TX/2TX
5.47-5.73GHz	802.11a	20	1TX/2TX

Band	Mode	BWch (MHz)	Nant
5.47-5.73GHz	802.11n HT20	20	1TX/2TX
5.47-5.73GHz	802.11ac VHT20	20	1TX/2TX
5.47-5.73GHz	802.11ax HEW20	20	1TX/2TX
5.47-5.73GHz	802.11n HT40	40	1TX/2TX
5.47-5.73GHz	802.11ac VHT40	40	1TX/2TX
5.47-5.73GHz	802.11ax HEW40	40	1TX/2TX
5.47-5.73GHz	802.11ac VHT 80	80	1TX/2TX
5.47-5.73GHz	802.11ax HEW 80	80	1TX/2TX
5.47-5.73GHz	802.11ac VHT160	160	1TX/2TX
5.47-5.73GHz	802.11ax HEW160	160	1TX/2TX

Note:
- 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- VHT20, VHT40, VHT80 and VHT160 a use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- HEW20, HEW40, HEW80 and HEW160 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- BWch is the nominal channel bandwidth.

<For WLAN 6GHz>

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5925-6425	ax (HEW20)	5955-6415	1-93 [24]
	ax (HEW40)	5965-6405	3-91 [12]
	ax (HEW80)	5985-6385	7-87[6]
	ax (HEW160)	6025-6345	15-79[3]

Note:
- HEW20, HEW40, HEW80 and HEW160 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Ant.	Port		Brand	Model Name	Antenna Type	Connector	Gain (dBi)
	WLAN 2.4GHz / 5GHz / 6GHz	Bluetooth					
1	1/2	1	ARISTOTLE	RFA-27-JP378-4B-200	Monopole	I-PEX	Note 1
2	1/2	1	ARISTOTLE	RFA-27-JP326-MHF4300	PIFA	I-PEX	
3	1/2	1	ARISTOTLE	RFA-27-C38H1-MHF4300	Dipole	I-PEX	

Note 1

Ant.	Port		Gain (dBi)			
	WLAN 2.4GHz / 5GHz / 6GHz	Bluetooth	WLAN 2.4GHz	WLAN 5GHz UNII1~UNII2C	WLAN 6GHz UNII 5	Bluetooth
1	1/2	1	3.38	4.86	4.86	3.38
2	1/2	1	3.50	5.00	5.00	3.50
3	1/2	1	3.00	5.00	5.00	3.00

Note 2: The above information was declared by manufacturer.
Note 3: Only the highest gain antenna (antenna 2) was selected to test and record in this report.
Note 4: For more antenna information, refer to Appendix A. Antenna List.

<For WLAN 2.4GHz function>
For IEEE 802.11b/g/n/VHT/ax (1TX/2RX):
The EUT supports the antenna with TX diversity functions.
Both Port 1 and Port 2 support transmit and receive functions, but only one of them will be used at one time.
The Port 2 generated the worst case, so it was selected to test and record in the report.
Port 1 and Port 2 could receive simultaneously
For IEEE 802.11b/g/n/VHT/ax (2TX/2RX):
Port 1 and Port 2 can be used as transmitting/receiving antenna.
Port 1 and Port 2 could transmit/receive simultaneously.
<For WLAN 5GHz function>
For IEEE 802.11a/n/ac/ax (1TX/2RX):
The EUT supports the antenna with TX diversity functions.
Both Port 1 and Port 2 support transmit and receive functions, but only one of them will be used at one time.
The Port 2 generated the worst case, so it was selected to test and record in the report.
Port 1 and Port 2 could receive simultaneously
For IEEE 802.11a/n/ac/ax (2TX/2RX):
Port 1 and Port 2 can be used as transmitting/receiving antenna.
Port 1 and Port 2 could transmit/receive simultaneously.
<For WLAN 6GHz function>
For IEEE 802.11ax (1TX/2RX):
The EUT supports the antenna with TX diversity functions.
Both Port 1 and Port 2 support transmit and receive functions, but only one of them will be used at one time.
The Port 1 generated the worst case, so it was selected to test and record in the report.

Port 1 and Port 2 could receive simultaneously

For IEEE 802.11a/n/ac/ax (2TX/2RX):

Port 1 and Port 2 can be used as transmitting/receiving antenna.

Port 1 and Port 2 could transmit/receive simultaneously.

<For Bluetooth function> (1TX/1RX):

Only Port 1 can be used as transmitting/receiving antenna.

1.1.3 EUT Information

<For WLAN>

EUT Power Type	From host system			
TPC Function	☒	With TPC	☐	Without TPC
Operate Mode	☐	Master		
	☐	Slave with radar detection		
	☒	Slave without radar detection		
Device Type	☒	LPI devices		
	☒	VLP devices		

Note: The above information was declared by manufacturer.

<For Bluetooth>

EUT Power Type	From host system	
Support Mode	☒	LE 1M PHY: 1 Mb/s
	☒	LE Coded PHY (S=2): 500 Kb/s
	☒	LE Coded PHY (S=8): 125 Kb/s
	☒	LE 2M PHY: 2 Mb/s

Note: The above information was declared by manufacturer.

1.2 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- MIC Ordinance Regulating Radio Equipment Article 49.20
- MIC Notice No.88 Appendix No.43
- MIC Notice No.88 Appendix No.44
- [Test method temporarily determined by TELEC]
- MIC Certification Rule, Article 2 Paragraph 1 of Item 79
- MIC Certification Rule, Article 2 Paragraph 1 of Item 80
- 6 GHz band low power data communication system (DSPR)

1.3 Accessories

N/A

1.4 Table for Slight Change

This product is an extension of original one reported under Sporton project number: JR1N0223-39

Below is the illustration for the change of the product with respect to the original one.

Detail / Report No.	Gist	Modifications
JR1N0223-39	The total antennas amounted to 228 sets.	There is no hardware or electrical modification made to the applying modular transmitter itself. Adding 3 sets of Dipole antenna and 22 sets of PIFA antenna with lower gain than the original report and it is not necessary to verify for test. Please refer to Appendix A for detailed antenna information.

Table for Filed Antenna

No.	Brand	Ant. Type	Con. Type	Peak Gain (dBi)			Model No.
				2.4GHz	5GHz	6GHz	
1	ARISTOTLE	Monopole	IPEX	3.38	4.86	4.86	RFA-27-JP378-4B-200
2	ARISTOTLE	PIFA	IPEX	3.50	5.00	5.00	RFA-27-JP326-MHF4300
3	ARISTOTLE	Dipole	IPEX	3.00	5.00	5.00	RFA-27-C38H1-MHF4300
4	HongBo	PIFA	IPEX	TX1: 3 TX2: 2.6	TX1: 4.98 TX2: 4	TX1: 4.71 TX2: 3.2	260-28185 260-28184
5	HongBo	PIFA	IPEX	TX1: 2.76 TX2: 2.58	TX1: 4.12 TX2: 3.02	TX1: 4.07 TX2: 3.07	260-28200 260-28201
6	HONG-BO	PIFA	IPEX	TX1: 1.19 TX2: -0.81	TX1: 2.45 TX2: 0.67	TX1: 2.87 TX2: 2.88	6036B0316501 6036B0316601
7	WNC	PIFA	IPEX	TX1: -0.62 TX2: -0.05	TX1: 0.1 TX2: -1.33	TX1: 0.17 TX2: -1.57	6036B316201 6036B0315801
8	High-Tek	PIFA	IPEX	TX1: 2.37 TX2: 1.03	TX1: 2.94 TX2: 2.95	TX1: 2.55 TX2: 2.62	219HCTN12198 219HCTN12197
9	WNC	PIFA	IPEX	TX1: 1.84 TX2: 0.47	TX1: 2.17 TX2: 2.84	TX1: 2.98 TX2: 2.75	48EABP01.SGCLOC 48EABP02.SGCLOC
10	High-Tek	PIFA	IPEX	TX1: 0.80 TX2: 1.84	TX1: 2.68 TX2: 2.86	TX1: 2.81 TX2: 2.90	219HCTN12198 219HCTN12197
11	WNC	PIFA	IPEX	TX1: -1.59 TX2: -0.54	TX1: 2.84 TX2: 1.11	TX1: 2.91 TX2: 2.1	48EABP01.SGCLOC 48EABP02.SGCLOC
12	AWAN	PIFA	IPEX	TX1: 2.45 TX2: 1.95	TX1: 2.34 TX2: 1.99	TX1: 2.53 TX2: 2.16	AYP6Y-200053 AYP6Y-200053
13	INPAQ	PIFA	IPEX	TX1: 2.31 TX2: 2.01	TX1: 2.21 TX2: 1.75	TX1: 2.75 TX2: 2.08	WA-P-LELE-04-024 WA-P-LELE-04-024
14	HONG-BO	PIFA	IPEX	TX1: 0.94 TX2: 1.79	TX1: 2.52 TX2: 1.04	TX1: 2.00 TX2: 1.08	6036B0316701 6036B0316701
15	WNC	PIFA	IPEX	TX1: 1.68 TX2: 1.74	TX1: 1.85 TX2: 1.16	TX1: 2.44 TX2: 1.11	6036B0315601 6036B0315601
16	HONG-BO	PIFA	IPEX	TX1: 0.47 TX2: -0.62	TX1: 2.39 TX2: -0.13	TX1: 1.47 TX2: 1.81	6036B0316701 6036B0316701
17	WNC	PIFA	IPEX	TX1: 2.16 TX2: 0.79	TX1: 2.19 TX2: 2.37	TX1: 2.4 TX2: 0.96	6036B0315601 6036B0315601
18	INPAQ	PIFA	IPEX	TX1: 1.73 TX2: 1.63	TX1: 2.37 TX2: 2.41	TX1: 2.42 TX2: 2.12	DQ6WAPLEL05 DQ6WAPLEL05
19	INPAQ	PIFA	IPEX	TX1: 1.73 TX2: 1.63	TX1: 2.37 TX2: 2.41	TX1: 2.42 TX2: 2.12	DQ6WAPLEL04 DQ6WAPLEL04
20	WNC	PIFA	IPEX	TX1: 2.31 TX2: 1.77	TX1: 1.28 TX2: 1.66	TX1: 1.34 TX2: 2.41	DQ6D15G7100 DQ6D15G7100
21	WNC	PIFA	IPEX	TX1: 2.31 TX2: 1.77	TX1: 1.28 TX2: 1.66	TX1: 1.34 TX2: 2.41	DQ6D15G9100 DQ6D15G9100
22	High-Tek	PIFA	IPEX	TX1: 2.96 TX2: 1.23	TX1: 1.23 TX2: 0.58	TX1: 1.96 TX2: 1.94	0ACQD022032N 0ACQD022032N
23	Pulse	PIFA	IPEX	TX1: 2.93 TX2: 2.37	TX1: 2.24 TX2: 0.32	TX1: 2.18 TX2: -0.20	TQ23700 TQ23700
24	High-Tek	PIFA	IPEX	TX1: 1.51 TX2: -0.32	TX1: 2.92 TX2: 2.90	TX1: 2.94 TX2: 2.98	DC33002O500 DC33002O510
25	High-Tek	PIFA	IPEX	TX1: 2.23 TX2: -0.02	TX1: 2.91 TX2: 2.98	TX1: 2.87 TX2: 2.86	DC33002O100 DC33002O100

26	High-Tek	PIFA	IPEX	TX1: -1.50 TX2: -0.62	TX1: -0.39 TX2: 0.24	TX1: 0.62 TX2: 2.89	DC33002O300 DC33002O310
27	High-Tek	PIFA	IPEX	TX1: -1.00 TX2: -1.09	TX1: 0.16 TX2: 0.63	TX1: 2.29 TX2: 1.32	DC33002O300 DC33002O310
28	LUXSHARE HongBo	PIFA	IPEX	TX1: 3 TX2: 2.33	TX1: 4.87 TX2: 3.88	TX1: 4.71 TX2: 2.99	260-28185 L01RF136-DT-H
29	Luxshae	PIFA	IPEX	TX1: 2.13 TX2: 2.33	TX1: 4.36 TX2: 3.88	TX1: 4.17 TX2: 2.99	L01RF137-DT-H L01RF136-DT-H
30	Luxshae-ICT(Main) HongBo(Aux)	PIFA	IPEX	TX1: 2.13 TX2: 2.6	TX1: 4.36 TX2: 4	TX1: 4.17 TX2: 3.2	L01RF137-DT-H 260-28184
31	Luxshae-ICT	PIFA	IPEX	TX1: 2.88 TX2: 2.36	TX1: 3.89 TX2: 4.77	TX1: 3.93 TX2: 4.69	L01RF141-DT-H L01RF142-DT-H
32	LUXSHARE-ICT	PIFA	IPEX	TX1: 2.78 TX2: 2.36	TX1: 3.55 TX2: 2.82	TX1: 3.93 TX2: 3.30	DC33001YL00 DC33001YL10
33	Speed Wireless Technical Co., LTD.	PIFA	IPEX	TX1: 2.97 TX2: 2.82	TX1: 4.87 TX2: 3.31	TX1: 4.24 TX2: 3.96	DC33001YJ00 DC33001YJ10
34	HONG-BO	PIFA	IPEX	TX1: 0.64 TX2: -1.25	TX1: 1.47 TX2: 1.48	TX1:2.31 TX2:-0.16	6036B0310101 6036B0310901
35	WNC	PIFA	IPEX	TX1: -1.36 TX2: -1.19	TX1:0.67 TX2:0.24	TX1:-1.23 TX2:-0.43	6036B0306501 6036B0306201
36	HONG-BO	PIFA	IPEX	TX1: 0.85 TX2: 0.95	TX1: 2.52 TX2: 2.2	TX1:1.97 TX2:2.06	6036B0308601 6036B0308701
37	WNC	PIFA	IPEX	TX1: -0.90 TX2:-1.81	TX1: 0.77 TX2: -0.94	TX1:-0.49 TX2:0.68	6036B0306701 6036B0307201
38	HONG-BO	PIFA	IPEX	TX1: 2.81 TX2:1.01	TX1:2.21 TX2:2.5	TX1:2.9 TX2:1.59	6036B0309101 6036B0309201
39	WNC	PIFA	IPEX	TX1: 0.35 TX2:-0.53	TX1: 1.39 TX2: -0.26	TX1:0.7 TX2:-1.7	6036B0307501 6036B0307801
40	VSO	PIFA	IPEX	TX1: 2.02 TX2:1.13	TX1:2.15 TX2: 2.47	TX1:2.45 TX2:1.70	821-101-012-11507 821-101-012-11508
41	VSO	PIFA	IPEX	TX1: 2.29 TX2: 2.86	TX1:2.45 TX2: 1.67	TX1:2.60 TX2:2.22	821-101-012-11505 821-101-012-11506
42	HONG-BO	PIFA	IPEX	TX1: 0.26 TX2:0.35	TX1: 1.04 TX2: 1.88	TX1:2.38 TX2:2.66	6036B0319701 6036B0319601
43	HONG-BO	PIFA	IPEX	TX1: -0.98 TX2:-1.05	TX1:2.15 TX2:1.28	TX1:1.97 TX2:2.49	6036B0319701 6036B0319601
44	WNC	PIFA	IPEX	TX1: -1.50 TX2:-1.41	TX1: 1.56 TX2: -0.49	TX1:0.35 TX2:0.18	6036B0319901 6036B0319801
45	WNC	PIFA	IPEX	TX1: -1.56 TX2:-1.42	TX1: 1.21 TX2: 0.24	TX1:1.12 TX2:0.37	6036B0319901 6036B0319801
46	HONG-BO	PIFA	IPEX	TX1: 0.02 TX2:-0.40	TX1: 2.51 TX2: 2.91	TX1:2.25 TX2:2.91	DQ602381200 DQ602381200
47	WNC	PIFA	IPEX	TX1: 1.81 TX2:-0.17	TX1: 2.49 TX2: 1.48	TX1:2.33 TX2:2.61	DQ6L15G4401 DQ6L15G4401
48	HONG-BO	PIFA	IPEX	TX1: 2.44 TX2:-0.94	TX1: 2.51 TX2: 2.94	TX1:2.25 TX2:2.94	DQ602349201 DQ602349201
49	HONG-BO	PIFA	IPEX	TX1: 2.42 TX2:-1.36	TX1: 2.00 TX2: 2.10	TX1:2.60 TX2:2.81	DQ602349101 DQ602349101
50	WNC	PIFA	IPEX	TX1: 1.85 TX2:-1.00	TX1: 2.38 TX2: 2.02	TX1:2.22 TX2:2.05	DQ6215G2800 DQ6215G2800

51	WNC	PIFA	IPEX	TX1:-0.31 TX2:-1.17	TX1:2.27 TX2: 2.48	TX1:2.26 TX2:1.61	DQ6215G2700 DQ6215G2700
52	HONG-BO	PIFA	IPEX	TX1: -0.47 TX2:-1.40	TX1:0.35 TX2: -0.25	TX1:2.98 TX2:2.55	DQ602381300 DQ602381300
53	WNC	PIFA	IPEX	TX1: -0.75 TX2:-0.71	TX1: 2.56 TX2: 2.32	TX1:2.43 TX2:2.97	DQ6L15G4500 DQ6L15G4500
54	HONG-BO	PIFA	IPEX	TX1:0.72 TX2:-0.74	TX1: 2.04 TX2: 1.78	TX1:2.80 TX2:1.25	DQ602348801 DQ602348801
55	HONG-BO	PIFA	IPEX	TX1: 2.43 TX2:-0.43	TX1: 2.09 TX2: 2.80	TX1:2.99 TX2:2.82	DQ602348901 DQ602348901
56	WNC	PIFA	IPEX	TX1: -1.43 TX2:-1.22	TX1:0.16 TX2: 0.27	TX1:2.43 TX2:1.46	DQ6215G2600 DQ6215G2600
57	WNC	PIFA	IPEX	TX1: 0.89 TX2:0.61	TX1: 1.85 TX2: 0.49	TX1:1.57 TX2:1.15	DQ6215G2500 DQ6215G2500
58	High-Tek	PIFA	IPEX	TX1: -1.10 TX2:-0.84	TX1:-1.11 TX2: 0.59	TX1:2.82 TX2:1.45	DC33002SS10 DC33002SS10
59	High-Tek	PIFA	IPEX	TX1:-0.81 TX2:-1.84	TX1:1.75 TX2: 1.61	TX1:2.53 TX2:2.80	DC33002SS00 DC33002SS00
60	High-Tek	PIFA	IPEX	TX1:2.81 TX2:2.63	TX1: 2.92 TX2: 2.88	TX1:3.93 TX2:3.80	DC33002ST10 DC33002ST10
61	High-Tek	PIFA	IPEX	TX1: 2.03 TX2:2.14	TX1: 2.91 TX2: 2.88	TX1:3.92 TX2:3.85	DC33002ST00 DC33002ST00
62	SOUTHSTAR	PIFA	IPEX	TX1: 1.56 TX2:0.58	TX1: 2.64 TX2: 1.25	TX1:1.96 TX2:1.95	DC33002SU10 DC33002SU10
63	SOUTHSTAR	PIFA	IPEX	TX1: 0.24 TX2:-0.24	TX1: 2.94 TX2: 2.06	TX1:3.09 TX2:3.27	DC33002SU00 DC33002SU00
64	SOUTHSTAR	PIFA	IPEX	TX1: 0.84 TX2: 2.05	TX1: 2.84 TX2: 2.10	TX1: 2.99 TX2: 2.76	DC33002SV10 DC33002SV10
65	SOUTHSTAR	PIFA	IPEX	TX1: 0.24 TX2: -0.90	TX1: 2.95 TX2: 2.98	TX1: 2.65 TX2: 2.81	DC33002SV00 DC33002SV00
66	SOUTHSTAR	PIFA	IPEX	TX1: 1.66 TX2: 1.61	TX1: 2.68 TX2: 2.47	TX1: 2.47 TX2: 2.53	DC33002O000 DC33002O000
67	SOUTHSTAR	PIFA	IPEX	TX1: 1.86 TX2:1.84	TX1: 2.98 TX2: 2.38	TX1: 2.86 TX2: 2.38	DC33002O400 DC33002O410
68	SOUTHSTAR	PIFA	IPEX	TX1: 1.66 TX2: 1.61	TX1: 2.68 TX2: 2.47	TX1: 2.47 TX2: 2.53	DC33002O000 DC33002O000
69	SOUTHSTAR	PIFA	IPEX	TX1: 1.03 TX2: 0.66	TX1: 2.56 TX2: 2.29	TX1: 2.42 TX2: 2.13	DC33002O200 DC33002O210
70	SOUTHSTAR	PIFA	IPEX	TX1:1.32 TX2:0.92	TX1: 2.80 TX2: 2.42	TX1: 2.79 TX2: 2.76	DC33002O200 DC33002O210
71	SOUTHSTAR	PIFA	IPEX	TX1: 1.03 TX2: 0.66	TX1: 2.56 TX2: 2.29	TX1: 2.42 TX2: 2.13	DC33002O200 DC33002O210
72	SOUTHSTAR	PIFA	IPEX	TX1: 1.32 TX2: 0.92	TX1: 2.80 TX2: 2.42	TX1: 2.79 TX2: 2.76	DC33002O200 DC33002O210
73	High-Tek	PIFA	IPEX	TX1: 2.23 TX2:-0.02	TX1: 2.91 TX2: 2.98	TX1: 2.87 TX2: 2.86	DC33002O100 DC33002O100
74	High-Tek	PIFA	IPEX	TX1: -1.50 TX2: -0.62	TX1: 0.61 TX2: 1.29	TX1: 0.62 TX2: 2.89	DC33002O300 DC33002O310
75	High-Tek	PIFA	IPEX	TX1: -1.00 TX2: -1.09	TX1: 1.84 TX2: 1.32	TX1: 2.29 TX2: 0.04	DC33002O300 DC33002O310

76	AWAN	PIFA	IPEX	TX1: 2.74 TX2:1.51	TX1: 2.83 TX2: 2.95	TX1: 2.91 TX2: 2.23	025.9020M.0001 025.9020N.0001
77	High-Tek	PIFA	IPEX	TX1: 2.81 TX2: 2.73	TX1: 2.99 TX2: 2.98	TX1: 2.96 TX2: 2.73	025.9020M.0011 025.9020N.0011
78	WNC	PIFA	IPEX	TX1: 1.87 TX2: 2.24	TX1: 2.95 TX2: 2.96	TX1: 2.45 TX2: 0.77	025.9020M.0021 025.9020N.0021
79	AWAN	PIFA	IPEX	TX1: 1.72 TX2: 1.51	TX1: 2.98 TX2: 2.90	TX1: 2.89 TX2: 2.85	025.9020O.0001 025.9020P.0001
80	High-Tek	PIFA	IPEX	TX1: -0.66 TX2: 2.68	TX1: 2.99 TX2: 2.84	TX1: 2.02 TX2: 2.93	025.9020O.0011 025.9020P.0011
81	WNC	PIFA	IPEX	TX1: 1.25 TX2: 1.97	TX1: 2.93 TX2: 2.65	TX1: 1.09 TX2: 0.99	025.9020O.0021 025.9020P.0021
82	AWAN	PIFA	IPEX	TX1: 1.66 TX2: 0.83	TX1: 2.89 TX2: 1.92	TX1: 2.19 TX2: 1.20	025.90218.0001 025.90219.0001
83	High-Tek	PIFA	IPEX	TX1: 3.14 TX2: 1.19	TX1: 2.92 TX2: 0.21	TX1: 4.25 TX2: 1.8	025.901Y8.0001 025.901Y9.0001
84	WNC	PIFA	IPEX	TX1: 2.98 TX2: 2.64	TX1: 2.69 TX2: 3.01	TX1: 3.40 TX2: 4.58	025.901YU.0001 025.901YV.0001
85	AWAN	PIFA	IPEX	TX1: 2.63 TX2: 2.24	TX1: 1.44 TX2: 0.47	TX1: 1.65 TX2: 1.06	025.90216.0001 025.90217.0001
86	High-Tek	PIFA	IPEX	TX1: 2.04 TX2: 2.80	TX1: 3.68 TX2: 3.58	TX1: 4.29 TX2: 3.88	025.901Y6.0001 025.901Y7.0001
87	WNC	PIFA	IPEX	TX1: 2.98 TX2: 1.60	TX1: 2.32 TX2: 3.83	TX1: 1.81 TX2: 3.68	025.901YQ.0001 025.901YR.0001
88	AWAN	PIFA	IPEX	TX1: 2.53 TX2: 1.94	TX1: 2.89 TX2: 2.75	TX1: 2.84 TX2: 2.66	025.9021A.0001 025.9021B.0001
89	High-Tek	PIFA	IPEX	TX1: 2.3 TX2: 1.09	TX1: 3.21 TX2: 3.87	TX1: 3.88 TX2: 3.83	025.901Y4.0001 025.901Y4.0001
90	WNC	PIFA	IPEX	TX1: 2.73 TX2: 0.75	TX1: 1.98 TX2: 2.18	TX1: 2.87 TX2: 4.27	025.901YS.0001 025.901YT.0001
91	Pulse	PIFA	IPEX	TX1: -0.78 TX2: 2.38	TX1: 0.36 TX2: 0.72	TX1: -0.43 TX2: -0.14	TZ21591 TZ21591
92	INPAQ	PIFA	IPEX	TX1: 1.16 TX2: 2.48	TX1: 1.43 TX2: 2.38	TX1: 0.81 TX2: 1.33	WA-P-LELE-04-030 WA-P-LELE-04-030
93	NISSEI	PIFA	IPEX	TX1:1.15 TX2:-0.21	TX1:1.19 TX2:-0.08	TX1:1.47 TX2:-0.51	CP833301 CP833301
94	High-Tek	PIFA	IPEX	TX1: 0.24 TX2: 0.95	TX1: -0.34 TX2: 0.15	TX1: -0.27 TX2: 1.82	0ACCN021020N 0ACCN021019N
95	WNC	PIFA	IPEX	TX1: 1.88 TX2: 1.69	TX1: 2.68 TX2: 2.25	TX1: 2.71 TX2: 2.97	81EABP15.G22 81EABP15.G21
96	INPAQ	PIFA	IPEX	TX1: 2.57 TX2: 2.81	TX1: 2.72 TX2: 2.95	TX1: 2.83 TX2: 2.81	WA-P-LE-02-143 WA-P-LE-02-142
97	WNC	PIFA	IPEX	TX1: 1.67 TX2: -0.48	TX1: -0.16 TX2: 1.26	TX1: 0.51 TX2: 1.62	DC33002SY10 DC33002SY00
98	INPAQ	PIFA	IPEX	TX1: 2.28 TX2: 2.5	TX1: 2.89 TX2: 1.93	TX1: 2.95 TX2: 2.19	WA-P-LE-02-145 WA-P-LE-02-144
99	WNC	PIFA	IPEX	TX1: 0.68 TX2: 2.02	TX1: -0.27 TX2: 0.73	TX1: 0.02 TX2: -0.18	DC33002SW10 DC33002SW00
100	High-tek	PIFA	IPEX	TX1: 0.99 TX2: 2.59	TX1: 2.59 TX2: 2.46	TX1: 2.98 TX2: 2.81	219HCTN12275 219HCTN12274
101	WNC	PIFA	IPEX	TX1: 0.21 TX2: -0.11	TX1: 2.14 TX2: 2.98	TX1: 2.70 TX2: 2.57	48EABP0S 48EABP0R

102	INPAQ	PIFA	IPEX	TX1: 2.51 TX2: 2.58	TX1: 2.19 TX2: 2.14	TX1: 2.47 TX2: 2.45	DC33002T100 DC33002T100
103	WNC	PIFA	IPEX	TX1:1.75 TX2:1.73	TX1: 2.10 TX2: 0.11	TX1: 1.37 TX2: 0.33	DC33002T200 DC33002T200
104	AWAN	PIFA	IPEX	TX1:2.45 TX2:1.95	TX1:2.34 TX2:1.99	TX1:2.53 TX2:2.16	AYP6Y-200053 AYP6Y-200053
105	INPAQ	PIFA	IPEX	TX1:2.31 TX2:2.01	TX1:2.21 TX2:1.75	TX1:2.75 TX2:2.08	WA-P-LELE-04-024 WA-P-LELE-04-024
106	AWAN	PIFA	IPEX	TX1:2.64 TX2:2.38	TX1:3.68 TX2:3.70	TX1:3.59 TX2:3.95	AYP6Y-200059 AYP6Y-200059
107	AWAN	PIFA	IPEX	TX1:2.98 TX2:2.77	TX1:2.26 TX2:2.83	TX1:2.68 TX2:2.44	AYP6Y-200060 AYP6Y-200060
108	AWAN	PIFA	IPEX	TX1:2.56 TX2:2.84	TX1:2.83 TX2:2.65	TX1:2.65 TX2:2.72	AYP6Y-2000065 AYP6Y-2000065
109	Speed	PIFA	IPEX	TX1:2.15 TX2:2.45	TX1:3.33 TX2:4.57	TX1:4.67 TX2:4.44	F-0G-FS-6152-003-00 F-0G-FS-6152-003-00
110	High-Tek	PIFA	IPEX	TX1:2.93 TX2:1.14	TX1:2.81 TX2:-0.04	TX1:4.75 TX2:2.27	0ACQD022066N 0ACQD022066N
111	Pulse	PIFA	IPEX	TX1:2.95 TX2:2.87	TX1:2.96 TX2:0.62	TX1:2.18 TX2:0.65	ANTA0ZQ13562WLAN3 ANTA0ZQ13562WLAN3
112	LUXSHARE-ICT	PIFA	IPEX	TX1:2.86 TX2:2.87	TX1:4.67 TX2:4.05	TX1:4.52 TX2:3.95	DC33001ZS00 DC33001ZS10
113	Speed	PIFA	IPEX	TX1:2.34 TX2:2.12	TX1:2.90 TX2:3.26	TX1:4.83 TX2:4.65	DC33001ZU00 DC33001ZU10
114	INPAQ	PIFA	IPEX	TX1:2.83 TX2:2.88	TX1:3.87 TX2:2.47	TX1:3.90 TX2:3.86	DC33001ZY00 DC33001ZY10
115	INNOWAVE	PIFA	IPEX	TX1:2.12 TX2:2.21	TX1:3.22 TX2:3.39	TX1:3.36 TX2:3.26	F00197313110001 F00197313110001
116	INPAQ	PIFA	IPEX	TX1:2.99 TX2:2.63	TX1:2.92 TX2:2.9	TX1:2.84 TX2:3.37	WA-P-LELE-04-038 WA-P-LELE-04-038
117	Amphenol	PIFA	IPEX	TX1:1.7 TX2:1.9	TX1:3.0 TX2:3.4	TX1:3.9 TX2:3.9	DC33001W000 DC33001W000
118	LUXSHARE-ICT	PIFA	IPEX	TX1:2.86 TX2:2.38	TX1:3.89 TX2:3.48	TX1:4.54 TX2:4.17	DC33001XZ00 DC33001XZ00
119	Speed	PIFA	IPEX	TX1:0.15 TX2:0.33	TX1:3.00 TX2:4.05	TX1:3.67 TX2:4.02	DC33001XY00 DC33001XY00
120	LUXSHARE-ICT	PIFA	IPEX	TX1:2.55 TX2:2.16	TX1:3.80 TX2:4.10	TX1:4.59 TX2:3.79	DC33001XU00 DC33001XU00
121	INPAQ	PIFA	IPEX	TX1:2.85 TX2:2.98	TX1:2.90 TX2:2.60	TX1:2.96 TX2:2.98	DC33001XS00 DC33001XS00
122	Speed	PIFA	IPEX	TX1:0.91 TX2:2.38	TX1:3.31 TX2:3.35	TX1:4.38 TX2:4.21	DC33001XT00 DC33001XT00
123	AWAN	PIFA	IPEX	TX1:2.15 TX2:1.98	TX1:2.31 TX2:2.61	TX1:2.56 TX2:2.30	AXF6Y-100055 AXF6Y-100056
124	Speed	PIFA	IPEX	TX1:2.59 TX2:2.91	TX1:3.7 TX2:4.29	TX1:4.49 TX2:4.35	DC33001Y000 DC33001Y010
125	Amphenol	PIFA	IPEX	TX1:1.06 TX2:2.48	TX1:2.26 TX2:3.92	TX1:4.32 TX2:4.46	DC330020500 DC330020500
126	LUXSHARE-ICT	PIFA	IPEX	TX1:2.11 TX2:2.84	TX1:2.63 TX2:3.11	TX1:4.01 TX2:3.17	DC330020600 DC330020600
127	Speed	PIFA	IPEX	TX1:-0.25 TX2:2.38	TX1:3.03 TX2:2.81	TX1:2.78 TX2:2.71	DC330020700 DC330020700
128	INPAQ	PIFA	IPEX	TX1:2.23 TX2:1.36	TX1:3.26 TX2:2.93	TX1:4.09 TX2:3.90	DC330020100 DC330020110
129	INPAQ	PIFA	IPEX	TX1:2.96 TX2:2.98	TX1:4.25 TX2:1.63	TX1:4.16 TX2:3.25	DC330021600 DC330021710

130	Speed	PIFA	IPEX	TX1:1.83 TX2:2.46	TX1:3.57 TX2:3.87	TX1:3.56 TX2:3.62	DC33001ZT00 DC33001ZT10
131	LUXSHARE-ICT	PIFA	IPEX	TX1:1.99 TX2:1.39	TX1:4.29 TX2:4.57	TX1:4.27 TX2:4.45	DC33001ZR00 DC33001ZR10
132	AWAN	PIFA	IPEX	TX1:1.62 TX2:1.33	TX1:1.80 TX2:1.73	TX1:1.87 TX2:1.92	DQ60AUP6Y13 DQ60AUP6Y13
133	WNC	PIFA	IPEX	TX1:0.97 TX2:1.64	TX1:2.20 TX2:2.19	TX1:2.28 TX2:1.54	DQ6B15GC300 DQ6B15GC300
134	HONG-BO	PIFA	IPEX	TX1:1.81 TX2:1.90	TX1:2.80 TX2:2.21	TX1:2.15 TX2:2.64	6036B0340901 6036B0341001
135	WNC	PIFA	IPEX	TX1:-0.50 TX2:-1.81	TX1:2.78 TX2:2.86	TX1:2.79 TX2:2.51	6036B0338801 6036B0338901
136	HONG-BO	PIFA	IPEX	TX1:-1.25 TX2:0.64	TX1:1.48 TX2:1.47	TX1:-0.16 TX2:2.31	6036B0310901 6036B0310101
137	WNC	PIFA	IPEX	TX1:1.68 TX2:1.08	TX1:2.45 TX2:2.48	TX1:1.73 TX2:1.36	6036B0306201 6036B0306501
138	HONG-BO	PIFA	IPEX	TX1:0.51 TX2:2.37	TX1:0.87 TX2:2.28	TX1:1.87 TX2:2.91	6036B0340701 6036B0340801
139	WNC	PIFA	IPEX	TX1:-1.37 TX2:-1.64	TX1:2.37 TX2:1.90	TX1:2.40 TX2:2.41	6036B0339101 6036B0339001
140	HONG-BO	PIFA	IPEX	TX1:0.95 TX2:0.85	TX1:2.20 TX2:2.52	TX1:2.06 TX2:1.97	6036B0308701 6036B0308601
141	WNC	PIFA	IPEX	TX2:1.41 TX1:2.40	TX2:2.43 TX1:2.20	TX2:2.42 TX1:2.24	6036B0307201 6036B0306701
142	HONG-BO	PIFA	IPEX	TX2:1.13 TX1:0.18	TX2:2.87 TX1:2.95	TX2:2.93 TX1:2.54	6036B0340501 6036B0340601
143	WNC	PIFA	IPEX	TX2:0.27 TX1:0.49	TX2:1.99 TX1:1.96	TX2:1.97 TX1:1.33	6036B0338601 6036B0338701
144	HONG-BO	PIFA	IPEX	TX1:1.01 TX2:2.81	TX1:2.50 TX2:2.21	TX1:1.59 TX2:2.90	6036B0309201 6036B0309101
145	WNC	PIFA	IPEX	TX1:0.66 TX2:0.97	TX1:0.78 TX2:1.77	TX1:-1.93 TX2:0.28	6036B0307801 6036B0307501
146	High-Tek	PIFA	IPEX	TX1:-1.88 TX2:-1.82	TX1:2.88 TX2:1.91	TX1:2.91 TX2:1.08	025.9027I.0001 025.9027H.0001
147	INPAQ	PIFA	IPEX	TX1:2.25 TX2:2.58	TX1:2.71 TX2:2.66	TX1:2.33 TX2:2.45	025.9027K.0001 025.9027J.0001
148	HONG-BO	PIFA	IPEX	TX1:0.35 TX2:0.26	TX1:1.88 TX2:1.04	TX1:2.66 TX2:2.38	6036B0319601 6036B0319701
149	HONG-BO	PIFA	IPEX	TX1:-1.05 TX2:-0.98	TX1:1.28 TX2:2.15	TX1:2.49 TX2:1.97	6036B0319601 6036B0319701
150	WNC	PIFA	IPEX	TX1:-1.41 TX2:-1.50	TX1:-0.49 TX2:1.56	TX1:0.18 TX2:0.35	6036B0319801 6036B0319901
151	WNC	PIFA	IPEX	TX1:-1.42 TX2:-1.56	TX1:0.24 TX2:1.21	TX1:0.37 TX2:1.12	6036B0319801 6036B0319901
152	High-Tek	PIFA	IPEX	TX1:-0.84 TX2:-1.25	TX1:2.78 TX2:2.77	TX1:2.76 TX2:2.84	DC33002SH00 DC33002SH10
153	WNC	PIFA	IPEX	TX1:0.79 TX2:0.16	TX1:1.06 TX2:0.78	TX1:0.77 TX2:1.29	81EABP15.G41 81EABP15.G42
154	Speed	PIFA	IPEX	TX1:2.78 TX2:2.92	TX1:3.10 TX2:3.48	TX1:3.77 TX2:3.15	F-0G-XZ-0300-000-K0 F-0G-XZ-0300-000-K0
155	ZhongTianXun	PIFA	IPEX	TX1:2.78 TX2:2.92	TX1:3.10 TX2:3.48	TX1:3.77 TX2:3.15	2.00005163 2.00005163
156	Speed	PIFA	IPEX	TX1:2.67 TX2:2.97	TX1:4.14 TX2:3.90	TX1:4.08 TX2:4.11	F-0G-XZ-0299-000-K0 F-0G-XZ-0299-000-K0
157	ZhongTianXun	PIFA	IPEX	TX1:2.67 TX2:2.97	TX1:4.14 TX2:3.90	TX1:4.08 TX2:4.11	2.00005169 2.00005169

158	High-Tek	PIFA	IPEX	TX1:1.91 TX2:0.23	TX1:2.06 TX2:-0.23	TX1:2.46 TX2:1.00	DC33002T900 DC33002T910
159	Pulse	PIFA	IPEX	TX1:2.82 TX2:2.70	TX1:2.88 TX2:2.95	TX1:3.88 TX2:3.70	DC33002TF00 DC33002TF10
160	High-Tek	PIFA	IPEX	TX1:0.75 TX2:1.44	TX1:2.85 TX2:2.81	TX1:2.88 TX2:2.89	DC33002TE00 DC33002TE00
161	Pulse	PIFA	IPEX	TX1:2.89 TX2:2.03	TX1:2.98 TX2:2.93	TX1:2.89 TX2:2.98	DC33002TI00 DC33002TI00
162	AWAN	PIFA	IPEX	TX1:1.98 TX2:1.77	TX1:2.26 TX2:2.43	TX1:2.68 TX2:2.44	AYL6Y-100020 AYL6Y-100021
163	Luxshare-ICT	PIFA	IPEX	TX1:-0.98 TX2:0.35	TX1:-0.97 TX2:1.98	TX1:-0.09 TX2:3.64	L01RF354-NB-H L01RF355-NB-H
164	Luxshare-ICT	PIFA	IPEX	TX1:2.91 TX2:2.88	TX1:3.26 TX2:3.15	TX1:4.52 TX2:4.10	DC330020Q00 DC330020Q10
165	Speed	PIFA	IPEX	TX1:1.74 TX2:2.59	TX1:3.67 TX2:3.07	TX1:3.11 TX2:3.81	DC330020P00 DC330020P10
166	High-Tek	PIFA	IPEX	TX1:1.80 TX2:2.33	TX1:2.82 TX2:2.68	TX1:3.92 TX2:3.87	DC33002TC00 DC33002TC10
167	Pulse	PIFA	IPEX	TX1:2.47 TX2:2.45	TX1:2.89 TX2:2.91	TX1:3.88 TX2:3.97	DC33002TD00 DC33002TD10
168	NISSEI	PIFA	IPEX	TX1: -0.21 TX2: 1.15	TX1: -0.08 TX2: 1.19	TX1: -0.51 TX2: 1.47	CP833301 CP833301
169	LUXSHARE	DIPOLE	SMA-RP	TX1: 0.30 TX2: -1.1	TX1: 0.20 TX2: -1.1	TX1: 1.20 TX2: 1.40	LA9RF059-CS-H LA9RF059-CS-H
170	INPAQ	DIPOLE	SMA-RP	TX1: 1.38 TX2: 1.44	TX1: 3.64 TX2: 3.53	TX1: 2.8 TX2: 3.08	DAM-I3-H1-M2-800-10-66 DAM-I3-H1-M2-800-10-66
171	AWAN	PIFA	IPEX	TX1: 0.95 TX2: 1.64	TX1: 0.97 TX2: 1.18	TX1: -0.71 TX2: 1.20	6036B0342001 6036B0341801
172	INPAQ	PIFA	IPEX	TX1: 2.12 TX2: 1.71	TX1: 3.07 TX2: 1.82	TX1: 2.82 TX2: 2.89	6036B0342101 6036B0341901
173	Amphenol	PIFA	IPEX	TX1: 2.84 TX2: 2.89	TX1: 4.26 TX2: 4.56	TX1: 4.81 TX2: 4.83	DC330020S00 DC330020S00
174	Speed	PIFA	IPEX	TX1: 2.87 TX2: 2.86	TX1: 4.43 TX2: 4.11	TX1: 4.61 TX2: 4.65	DC330020R00 DC330020R00
175	Amphenol	PIFA	IPEX	TX1: 2.28 TX2: 2.02	TX1: 4.16 TX2: 4.37	TX1: 4.52 TX2: 4.52	DC330020Y00 DC330020Y00
176	Speed	PIFA	IPEX	TX1: 2.78 TX2: 2.25	TX1: 3.59 TX2: 3.72	TX1: 3.62 TX2: 3.66	DC330020Z00 DC330020Z00
177	LUXSHARE-ICT	PIFA	IPEX	TX1: 2.80 TX2: 2.94	TX1: 4.08 TX2: 3.94	TX1: 3.87 TX2: 4.29	DC330020W00 DC330020W00
178	LUXSHARE-ICT	PIFA	IPEX	TX1: 2.93 TX2: 2.82	TX1: 4.11 TX2: 4.03	TX1: 4.31 TX2: 4.56	DC330021000 DC330021000
179	HongBo	PIFA	IPEX	TX1: 2.28 TX2: 2.81	TX1: 3.21 TX2: 3.27	TX1: 3.25 TX2: 3.24	DC330021100 DC330021100
180	Speed	PIFA	IPEX	TX1: 2.77 TX2: 2.51	TX1: 4.34 TX2: 3.89	TX1: 3.95 TX2: 3.96	DC330021200 DC330021200
181	INPAQ	PIFA	IPEX	TX1: 1.8 TX2: 1.5	TX1: 2.4 TX2: 2.5	TX1: 2.7 TX2: 2.6	DC330021500 DC330021500
182	Speed	PIFA	IPEX	TX1: 2.44 TX2: 1.16	TX1: 4.58 TX2: 4.59	TX1: 4.10 TX2: 4.35	DC330021300 DC330021300
183	INPAQ	PIFA	IPEX	TX1: 2.72 TX2: 2.72	TX1: 3.44 TX2: 3.39	TX1: 3.47 TX2: 3.42	WA-P-LELE-04-038 WA-P-LELE-04-038
184	AWAN	PIFA	IPEX	TX1: 2.73 TX2: 2.91	TX1: 3.52 TX2: 3.76	TX1: 3.87 TX2: 3.79	AYP6Y-200060 AYP6Y-200060
185	High-Tek Electronics	PIFA	IPEX	TX1: 2.95 TX2: 2.01	TX1: 2.96 TX2: 2.36	TX1: 2.99 TX2: 2.46	0ACAVC23001N 0ACAVC23001N

186	AWAN	PIFA	IPEX	TX1: 0.87 TX2: 1.72	TX1: 1.48 TX2: 1.96	TX1: 1.97 TX2: 1.41	6036B0342001 (AYP6Y-100412) 6036B0341801 (AYP6Y-100411)
187	TAIWAN SPEED WIRELESS	PIFA	IPEX	TX1: 1.13 TX2: 2.32	TX1: 2.92 TX2: 2.81	TX1: 2.95 TX2: 2.62	F-0G-48-6005-001-00 F-0G-48-6005-001-00
188	SPEED	PIFA	IPEX	TX1: 0.15 TX2: 0.66	TX1: 2.49 TX2: 2.67	TX1: 2.27 TX2: 3.06	F-0G-FS-6151-003-00 F-0G-FS-6151-003-00
189	AWAN	PIFA	IPEX	TX1: 2.75 TX2: 2.95	TX1: 2.81 TX2: 2.98	TX1: 2.81 TX2: 2.85	AYP6Y-200064 (025.9028H.0001) AYP6Y-200064 (025.9028H.0001)
190	Amphenol	PIFA	IPEX	TX1: 2.21 TX2: 2.86	TX1: 4.51 TX2: 4.67	TX1: 4.44 TX2: 4.68	DC330021N00 DC330021P10
191	Speed	PIFA	IPEX	TX1: 0.43 TX2: 2.07	TX1: 2.78 TX2: 2.53	TX1: 3.69 TX2: 3.70	DC330021L00 DC330021M10
192	AWAN	PIFA	IPEX	TX1: 2.81 TX2: 2.35	TX1: 4.36 TX2: 3.55	TX1: 3.38 TX2: 3.37	025.902AN.0011 025.902AN.0011
193	High-Tek Electronics	PIFA	IPEX	TX1: 0.94 TX2: 0.85	TX1: 2.83 TX2: 2.67	TX1: 2.80 TX2: 2.37	025.902AN.0001 025.902AN.0001
194	AWAN	PIFA	IPEX	TX1: 2.87 TX2: 2.08	TX1: 4.10 TX2: 4.39	TX1: 4.46 TX2: 4.44	025.902AO.0011 025.902AO.0011
195	High-Tek Electronics	PIFA	IPEX	TX1: 1.79 TX2: 1.67	TX1: 2.71 TX2: 2.71	TX1: 2.69 TX2: 2.89	025.902AO.0001 025.902AO.0001
196	INPAQ	PIFA	IPEX	TX1: 2.8 TX2: 2.9	TX1: 4.0 TX2: 4.4	TX1: 4.3 TX2: 4.6	WA-F-LE-02-035 WA-F-LE-01-004
197	AWAN	PIFA	IPEX	TX1: -1.66 TX2: 0.47	TX1: 1.90 TX2: 1.93	TX1: 0.75 TX2: 1.93	6036B0341201 (AYM6Y-100044) 6036B0341101 (AYM6Y-100045)
198	INPAQ Corporation	PIFA	IPEX	TX1: 2.43 TX2: 2.66	TX1: 2.91 TX2: 2.9	TX1: 2.71 TX2: 2.87	6036B0343401 6036B0343501
199	WNC	Dipole	RP-SMA	TX1: 1.40 TX2: 0.09	TX1: 0.73 TX2: 1.79	TX1: -0.02 TX2: 1.54	L95421-001 (81EABB15.GAU) L95421-001 (81EABB15.GAU)
200	Smart Approach Co., Ltd	PIFA	CCT	TX1: 2.64 TX2: 1.78	TX1: 3.81 TX2: 1.61	TX1: 2.89 TX2: 1.52	SE-EQFQH-001 SE-EQFQH-001
201	Pulse a YAGEO Company	PIFA	IPEX	TX1: 2.47 TX2: 1.86	TX1: 1.57 TX2: 1.34	TX1: 3.04 TX2: 3.79	TZ26820 TZ26820
202	LUXSHARE ICT	PIFA	IPEX	TX1: 0.18 TX2: -0.23	TX1: 4.30 TX2: 4.46	TX1: 4.28 TX2: 4.15	LA9RF467-CS-H LA9RF468-CS-H
203	INPAQ	PIFA	IPEX	TX1: -0.31 TX2: -0.44	TX1: 3.97 TX2: 4.39	TX1: 4.12 TX2: 4.09	MDA-LE-02-017 MDA-LE-01-008
204	AWAN	PIFA	IPEX	TX1: 2.54 TX2: 2.7	TX1: 2.84 TX2: 2.26	TX1: 2.98 TX2: 2.89	AYP6Y-200080 AYP6Y-200080
205	INPAQ	PIFA	IPEX	TX1: 2.87 TX2: 2.69	TX1: 3.21 TX2: 2.53	TX1: 2.51 TX2: 2.81	WA-P-LELE-04-053 WA-P-LELE-04-053
206	INPAQ	Dipole	Quick couple RP PLUG	TX1: 0.87 TX2: 1.89	TX1: 2.65 TX2: 3.02	TX1: 2.61 TX2: 2.73	DAM-I13-H1-B2-800-55-12 DAM-I13-H1-B2-800-55-12
207	INPAQ	Dipole	Quick couple RP PLUG	TX1: 0.87 TX2: 1.89	TX1: 2.65 TX2: 3.02	TX1: 2.61 TX2: 2.73	DAM-I15-H1-DB-800-55-16 DAM-I15-H1-DB-800-55-16

208	AWAN	PIFA	IPEX	TX1: 1.89 TX2: 1.93	TX1: 3.34 TX2: 3.26	TX1: 3.90 TX2: 3.17	AYF6Y-200011 (DC33002X30L) AYF6Y-200011 (DC33002X30L)
209	HongBo	PIFA	IPEX	TX1: 2.10 TX2: 2.46	TX1: 3.41 TX2: 3.54	TX1: 3.97 TX2: 3.42	260-24550 (DC33002X20L) 260-24550 (DC33002X20L)
210	AWAN	PIFA	IPEX	TX1: 1.69 TX2: 2.22	TX1: 3.15 TX2: 3.66	TX1: 3.88 TX2: 3.95	AYP6Y-100467 AYP6Y-100468
211	South Star	PIFA	IPEX	TX1: 1.89 TX2: 2.29	TX1: 3.06 TX2: 2.83	TX1: 3.17 TX2: 3.18	3.N201.0261 3.N201.0262
212	South Star	PIFA	IPEX	TX1: 1.79 TX2: 1.69	TX1: 2.73 TX2: 2.91	TX1: 2.83 TX2: 3.18	3.N201.0263 3.N201.0264
213	AWAN	PIFA	IPEX	TX1: 2.26 TX2: 2.16	TX1: 3.22 TX2: 3.82	TX1: 3.88 TX2: 3.53	AYP6Y-100469 AYP6Y-100470
214	AWAN	PIFA	IPEX	TX1: 2.64 TX2: 2.38	TX1: 3.68 TX2: 3.70	TX1: 3.59 TX2: 3.95	AYP6Y-200059 AYP6Y-200059
215	Innowave	PIFA	IPEX	TX1: 2.12 TX2: 2.21	TX1: 3.22 TX2: 3.39	TX1: 3.36 TX2: 3.26	F00197313110001 F00197313110001
216	AWAN	PIFA	IPEX	TX1: 2.73 TX2: 2.91	TX1: 3.52 TX2: 3.76	TX1: 3.87 TX2: 3.79	AYP6Y-200060 AYP6Y-200060
217	INPAQ	PIFA	IPEX	TX1: 2.96 TX2: 2.89	TX1: 3.27 TX2: 3.32	TX1: 3.51 TX2: 3.69	WA-P-LELE-04-050 WA-P-LELE-04-050
218	Hong Bo	PIFA	IPEX	TX1: 0.66 TX2: -0.25	TX1: 2.79 TX2: 2.77	TX1: 3.46 TX2: 4.41	260-29169 260-29168
219	WNC	PIFA	IPEX	TX1: 0.66 TX2: -0.25	TX1: 2.79 TX2: 2.77	TX1: 3.46 TX2: 4.41	81EAB315.G15 81EAB315.G14
220	High-Tek	PIFA	IPEX	TX1: 2.87 TX2: 2.71	TX1: 2.95 TX2: 2.72	TX1: 3.92 TX2: 3.73	0ACCN023011N (DC33002VF00) 0ACCN023011N (DC33002VF00)
221	INPAQ	PIFA	IPEX	TX1: 2.86 TX2: 2.81	TX1: 2.93 TX2: 2.97	TX1: 3.92 TX2: 3.95	WA-P-LELE-04-052 (DC33002VG00) WA-P-LELE-04-052 (DC33002VG00)
222	ARISTOTLE	Dipole	IPEX	TX1: 2.40 TX2: 2.40	TX1: 2.55 TX2: 2.55	TX1: 1.81 TX2: 1.81	RFA-27-C2M2-U-M62 RFA-27-C2M2-U-M62
223	AWAN	PIFA	IPEX	TX1: 1.33 TX2: 0.37	TX1: 1.82 TX2: 1.27	TX1: 2.29 TX2: 4.36	SA31M76154 SA31M76156
224	Luxshare-ICT	PIFA	IPEX	TX1: 2.55 TX2: 2.60	TX1: 3.05 TX2: 3.54	TX1: 4.75 TX2: 4.59	SA31M76155 SA31M76157
225	High-Tek	PIFA	IPEX	TX1: 2.66 TX2: 2.29	TX1: 2.01 TX2: 2.95	TX1: 2.65 TX2: 2.80	DC33002VR00 (0ACCN023018N) DC33002VR00 (0ACCN023018N)
226	Pulse	PIFA	IPEX	TX1: 2.56 TX2: 2.33	TX1: 2.86 TX2: 2.88	TX1: 3.52 TX2: 3.85	DC33002VT00 (TZ27620) DC33002VT00(TZ27620)
227	High-Tek	PIFA	IPEX	TX1: 2.77 TX2: 2.80	TX1: 2.65 TX2: 2.96	TX1: 2.82 TX2: 2.91	DC33002VU00 (0ACCN023016N) DC33002VU00 (0ACCN023016N)
228	Pulse	PIFA	IPEX	TX1: 2.53 TX2: 2.69	TX1: 2.89 TX2: 2.88	TX1: 3.86 TX2: 3.87	DC33002VV00(TZ27520) DC33002VV00(TZ27520)

———THE END———