

To:

Oct 31, 2019

Please be informed Toshiba has announced discontinuation on the following product(s) in Oct 2019.

**Products**

See pages 3 to 4.

**Last Time Buy (LTB) Option**

Toshiba will support last time buy (LTB) orders received on or before the dates listed above (LTB Date). Last time buy orders for all affected products must be in place in total by LTB Date. Deliveries will be scheduled and advised accordingly after receipt of LTB orders. However, unforeseen circumstances might prevent Toshiba to support partially or fully on LTB orders. If such event occurs, we will notify you of our best support plan as soon as possible. Thank you for your understanding. Should you have any questions, please contact your sales representative.

Best Regards,

Optoelectronic Device, Discrete Business Unit  
Toshiba America Electronic Components, Inc.

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**Substitution Level**

- 0: No recommended replacement part number
- 1: Package and characteristics are mostly same or better, not necessary to change other circuit to replace.
- 2: Package and characteristics are mostly same or better, but some modification of the other circuit is necessary.
- 3: Characteristics are same or better, but package/pin arrangement are different, so the other circuit modification is necessary.
- 4: Other reason.

**Reason**

1: Version up

2: Chip shrink

3: Integration of products

4: Discontinuation of assembly machine

5: No order forecast

6: Mask disposal rule applied

9: Others

Toshiba Internal Part Number	Generic Ordering Part Number	EOL Announcement Date	LTB Date	LTS Date	Replacement Part Number	Substitution Level	Reason	Comment
TL781(BL,F)	TL781(BL,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(BL,F)	1	3	
TL781(BLL,F)	TL781(BLL,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(BLL,F)	1	3	
TL781(BL-LF6,F)	TL781(BL-LF6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(BL-LF6,F)	1	3	
TL781(BLL-LF6,F)	TL781(BLL-LF6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(BLL-LF6,F)	1	3	
TL781(BLL-TP6,F)	TL781(BLL-TP6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(BLL-TP6,F)	1	3	
TL781(BL-TP6,F)	TL781(BL-TP6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(BL-TP6,F)	1	3	
TL781(D4,F)	TL781(D4,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4,F)	1	3	
TL781(D4-BL,F)	TL781(D4-BL,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4-BL,F)	1	3	
TL781(D4-BLL,F)	TL781(D4-BLL,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4-BLL,F)	1	3	
TL781(D4-BL-LF6,F)	TL781(D4-BL-LF6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4BL-LF6,F)	1	3	
TL781(D4BLL-LF6,F)	TL781(D4BLL-LF6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4B-LF6,F)	1	3	
TL781(D4BLL-TP6,F)	TL781(D4BLL-TP6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4B-T6,F)	1	3	
TL781(D4-BL-SD,F)	TL781(D4-BL-SD,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4-BL,F)	1	3	
TL781(D4-BL-TP6,F)	TL781(D4-BL-TP6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4BL-T6,F)	1	3	
TL781(D4-FUN,F)	TL781(D4-FUN,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4,F)	1	3	
TL781(D4-FUN,F)	TL781(D4-FUN,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4-GRL,F)	1	3	
TL781(D4-GB,F)	TL781(D4-GB,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4-GB,F)	1	3	
TL781(D4-GB-LF6,F)	TL781(D4-GB-LF6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4GB-LF6,F)	1	3	
TL781(D4-GB-TP6,F)	TL781(D4-GB-TP6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4GB-T6,F)	1	3	
TL781(D4-GR,F)	TL781(D4-GR,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4-GR,F)	1	3	
TL781(D4-GR-FD,F)	TL781(D4-GR-FD,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4-GR,F)	1	3	
TL781(D4-GRH,E)	TL781(D4-GRH,E)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4-GRH,F)	1	3	
TL781(D4-GRH,F)	TL781(D4-GRH,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4-GRH,F)	1	3	
TL781(D4GRH-LF6,F)	TL781(D4GRH-LF6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4GH-LF6,F)	1	3	
TL781(D4GRH-TP6,F)	TL781(D4GRH-TP6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4GH-T6,F)	1	3	
TL781(D4-GRL,F)	TL781(D4-GRL,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4-GRL,F)	1	3	
TL781(D4-GR-LF6,F)	TL781(D4-GR-LF6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4GR-LF6,F)	1	3	
TL781(D4-GR-LF6,F)	TL781(D4-GR-LF6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4-GRL,F)	1	3	
TL781(D4GRL6TC,F)	TL781(D4GRL6TC,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4GL-LF6,F)	1	3	
TL781(D4GRL-LF6,F)	TL781(D4GRL-LF6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4GL-LF6,F)	1	3	
TL781(D4GRL6TC,F)	TL781(D4GRL6TC,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4GL-T6,F)	1	3	
TL781(D4-GRL-TC,F)	TL781(D4-GRL-TC,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4-GRL,F)	1	3	
TL781(D4GRL-TP6,F)	TL781(D4GRL-TP6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4GL-T6,F)	1	3	
TL781(D4-GR-SD,F)	TL781(D4-GR-SD,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4-GR,F)	1	3	
TL781(D4GRT6-FD,F)	TL781(D4GRT6-FD,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4GR-T6,F)	1	3	
TL781(D4GRT6-SD,F)	TL781(D4GRT6-SD,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4GR-T6,F)	1	3	
TL781(D4GRT6-TC,F)	TL781(D4GRT6-TC,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4GR-T6,F)	1	3	
TL781(D4-GR-TC,F)	TL781(D4-GR-TC,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4-GR,F)	1	3	
TL781(D4-GR-TP6,F)	TL781(D4-GR-TP6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4GR-T6,F)	1	3	
TL781(D4-LF6,F)	TL781(D4-LF6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4-LF6,F)	1	3	
TL781(D4-TELS,F)	TL781(D4-TELS,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(TELS,F)	1	3	
TL781(D4TELS-T6,F)	TL781(D4TELS-T6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(TELS-T6,F)	1	3	
TL781(D4-TP6,F)	TL781(D4-TP6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4-TP6,F)	1	3	
TL781(D4-Y,F)	TL781(D4-Y,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4-Y,F)	1	3	
TL781(D4-YH,F)	TL781(D4-YH,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4-YH,F)	1	3	
TL781(D4-YH-LF6,F)	TL781(D4-YH-LF6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4YH-LF6,F)	1	3	
TL781(D4-YH-TP6,F)	TL781(D4-YH-TP6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4YH-T6,F)	1	3	
TL781(D4-Y-LF6,F)	TL781(D4-Y-LF6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4-Y-LF6,F)	1	3	
TL781(D4-Y-TP6,F)	TL781(D4-Y-TP6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(D4-Y-T6,F)	1	3	
TL781(DLT-HR,F)	TL781(DLT-HR,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(F)	1	3	
TL781(F)	TL781(F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(F)	1	3	
TL781(GB,F)	TL781(GB,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(GB,F)	1	3	
TL781(GB-LF6,F)	TL781(GB-LF6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(GB-LF6,F)	1	3	
TL781(GB-TP6,F)	TL781(GB-TP6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(GB-TP6,F)	1	3	
TL781(GR,F)	TL781(GR,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(GR,F)	1	3	
TL781(GRH,F)	TL781(GRH,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(GRH,F)	1	3	
TL781(GRH-LF6,F)	TL781(GRH-LF6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(GRH-LF6,F)	1	3	
TL781(GRH-TP6,F)	TL781(GRH-TP6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(GRH-TP6,F)	1	3	
TL781(GRL,F)	TL781(GRL,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(GRL,F)	1	3	
TL781(GR-LF6,F)	TL781(GR-LF6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(GR-LF6,F)	1	3	
TL781(GRL-LF6,F)	TL781(GRL-LF6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(GRL-TP6,F)	1	3	
TL781(GRL-TP6,F)	TL781(GRL-TP6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(GRL-TP6,F)	1	3	
TL781(GR-TP6,F)	TL781(GR-TP6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(GR-TP6,F)	1	3	
TL781(LF6,F)	TL781(LF6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(LF6,F)	1	3	
TL781(TELS,F)	TL781(TELS,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(TELS,F)	1	3	
TL781(TELS-TP6,F)	TL781(TELS-TP6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(TELS-T6,F)	1	3	
TL781(TP6,F)	TL781(TP6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(TP6,F)	1	3	
TL781(Y,F)	TL781(Y,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(Y,F)	1	3	
TL781(YH,F)	TL781(YH,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(YH,F)	1	3	
TL781(YH-LF6,F)	TL781(YH-LF6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(YH-LF6,F)	1	3	
TL781(YH-TP6,F)	TL781(YH-TP6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(YH-TP6,F)	1	3	
TL781(Y-LF6,F)	TL781(Y-LF6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(Y-LF6,F)	1	3	
TL781(Y-TP6,F)	TL781(Y-TP6,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785(Y-TP6,F)	1	3	
TL781F(ABB-TP7,F)	TL781F(ABB-TP7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785F(TP7,F)	1	3	
TL781F(BL,F)	TL781F(BL,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785F(BL,F)	1	3	
TL781F(BLL,F)	TL781F(BLL,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785F(BLL,F)	1	3	
TL781F(BL-LF7,F)	TL781F(BL-LF7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785F(BL-LF7,F)	1	3	
TL781F(BLL-LF7,F)	TL781F(BLL-LF7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785F(BLL-LF7,F)	1	3	
TL781F(BLL-TP7,F)	TL781F(BLL-TP7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TL785F(BLL-T7,F)	1	3	

Toshiba Internal Part Number	Generic Ordering Part Number	EOL Announcement Date	LTB Date	LTS Date	Replacement Part Number	Substitution Level	Reason
TLP781F(BL-TP7,F)	TLP781F(BL-TP7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(BL-TP7,F)	1	3
TLP781F(D4,F)	TLP781F(D4,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4,F)	1	3
TLP781F(D4ADGBT7,F)	TLP781F(D4ADGBT7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4GBT7,F)	1	3
TLP781F(D4-BL,F)	TLP781F(D4-BL,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4-BL,F)	1	3
TLP781F(D4-BLL,F)	TLP781F(D4-BLL,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4-BLL,F)	1	3
TLP781F(D4BLL-F7,F)	TLP781F(D4BLL-F7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4B-F7,F)	1	3
TLP781F(D4BL-LF7,F)	TLP781F(D4BL-LF7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4BLF7,F)	1	3
TLP781F(D4BLL-T7,F)	TLP781F(D4BLL-T7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4B-T7,F)	1	3
TLP781F(D4BL-TP7,F)	TLP781F(D4BL-TP7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4BLT7,F)	1	3
TLP781F(D4DLTGRH,F)	TLP781F(D4DLTGRH,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4-GRH,F)	1	3
TLP781F(D4DLTGR,F)	TLP781F(D4DLTGR,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4-GRL,F)	1	3
TLP781F(D4-FUN,F)	TLP781F(D4-FUN,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4,F)	1	3
TLP781F(D4-FUNBL,F)	TLP781F(D4-FUNBL,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4-BL,F)	1	3
TLP781F(D4FUNBLL,F)	TLP781F(D4FUNBLL,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4-BLL,F)	1	3
TLP781F(D4-FUNGB,F)	TLP781F(D4-FUNGB,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4-GB,F)	1	3
TLP781F(D4-FUNGR,F)	TLP781F(D4-FUNGR,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4-GR,F)	1	3
TLP781F(D4-GB,F)	TLP781F(D4-GB,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4-GB,F)	1	3
TLP781F(D4GB-LF7,F)	TLP781F(D4GB-LF7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4GBF7,F)	1	3
TLP781F(D4GB-TP7,F)	TLP781F(D4GB-TP7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4GBT7,F)	1	3
TLP781F(D4-GR,F)	TLP781F(D4-GR,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4-GR,F)	1	3
TLP781F(D4-GR,F,W)	TLP781F(D4-GR,F,W)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4-GR,F)	1	3
TLP781F(D4GR7PSE,F)	TLP781F(D4GR7PSE,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4GRT7,F)	1	3
TLP781F(D4GRF7C,F)	TLP781F(D4GRF7C,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4GRF7,F)	1	3
TLP781F(D4-GR-FD,F)	TLP781F(D4-GR-FD,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4-GR,F)	1	3
TLP781F(D4-GRH,F)	TLP781F(D4-GRH,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4-GRH,F)	1	3
TLP781F(D4GRH-F7,F)	TLP781F(D4GRH-F7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4GHF7,F)	1	3
TLP781F(D4GRH-T7,F)	TLP781F(D4GRH-T7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4GHT7,F)	1	3
TLP781F(D4-GRL,E)	TLP781F(D4-GRL,E)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4-GRL,F)	1	3
TLP781F(D4-GRL,F)	TLP781F(D4-GRL,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4-GRL,F)	1	3
TLP781F(D4-GRL,F,W)	TLP781F(D4-GRL,F,W)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4-GRL,F)	1	3
TLP781F(D4GRL-F7,F)	TLP781F(D4GRL-F7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4GHF7,F)	1	3
TLP781F(D4GR-LF7,F)	TLP781F(D4GR-LF7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4GRF7,F)	1	3
TLP781F(D4GRL-T7,F)	TLP781F(D4GRL-T7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4GLT7,F)	1	3
TLP781F(D4-GR-SD,F)	TLP781F(D4-GR-SD,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4-GR,F)	1	3
TLP781F(D4GRT7,F,W)	TLP781F(D4GRT7,F,W)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4GRF7,F)	1	3
TLP781F(D4GRT7FD,F)	TLP781F(D4GRT7FD,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4GRT7,F)	1	3
TLP781F(D4GRT7TC,F)	TLP781F(D4GRT7TC,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4GRT7,F)	1	3
TLP781F(D4-GR-TC,F)	TLP781F(D4-GR-TC,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4-GR,F)	1	3
TLP781F(D4GR-TP7,F)	TLP781F(D4GR-TP7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4GRT7,F)	1	3
TLP781F(D4-LF7,F)	TLP781F(D4-LF7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4-LF7,F)	1	3
TLP781F(D4NKODGB7F)	TLP781F(D4NKODGB7F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4GBT7,F)	1	3
TLP781F(D4SANGBT7F)	TLP781F(D4SANGBT7F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4GBT7,F)	1	3
TLP781F(D4TEE-T7,F)	TLP781F(D4TEE-T7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4TEET7,F)	1	3
TLP781F(D4-TELS,F)	TLP781F(D4-TELS,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4TELS,F)	1	3
TLP781F(D4-TP7,F)	TLP781F(D4-TP7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4-TP7,F)	1	3
TLP781F(D4-Y,F)	TLP781F(D4-Y,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4-Y,F)	1	3
TLP781F(D4-Y-FD,F)	TLP781F(D4-Y-FD,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4-Y,F)	1	3
TLP781F(D4-YH,F)	TLP781F(D4-YH,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4-YH,F)	1	3
TLP781F(D4YH-LF7,F)	TLP781F(D4YH-LF7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4YHF7,F)	1	3
TLP781F(D4YH-TP7,F)	TLP781F(D4YH-TP7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4YHT7,F)	1	3
TLP781F(D4-Y-LF7,F)	TLP781F(D4-Y-LF7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4Y-F7,F)	1	3
TLP781F(D4-Y-TP7,F)	TLP781F(D4-Y-TP7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(D4Y-T7,F)	1	3
TLP781F(F)	TLP781F(F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(F)	1	3
TLP781F(GB,F)	TLP781F(GB,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(GB,F)	1	3
TLP781F(GB-LF7,F)	TLP781F(GB-LF7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(GB-LF7,F)	1	3
TLP781F(GB-TP7,F)	TLP781F(GB-TP7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(GB-TP7,F)	1	3
TLP781F(GR,F)	TLP781F(GR,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(GR,F)	1	3
TLP781F(GRH,F)	TLP781F(GRH,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(GRH,F)	1	3
TLP781F(GRH-LF7,F)	TLP781F(GRH-LF7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(GRH-F7,F)	1	3
TLP781F(GRH-TP7,F)	TLP781F(GRH-TP7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(GRH-T7,F)	1	3
TLP781F(GRL,F)	TLP781F(GRL,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(GRL,F)	1	3
TLP781F(GR-LF7,F)	TLP781F(GR-LF7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(GR-LF7,F)	1	3
TLP781F(GRL-LF7,F)	TLP781F(GRL-LF7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(GRL-F7,F)	1	3
TLP781F(GRL-TP7,F)	TLP781F(GRL-TP7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(GRL-T7,F)	1	3
TLP781F(GR-TP7,F)	TLP781F(GR-TP7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(GR-TP7,F)	1	3
TLP781F(LF7,F)	TLP781F(LF7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(LF7,F)	1	3
TLP781F(TP7,F)	TLP781F(TP7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(TP7,F)	1	3
TLP781F(Y,F)	TLP781F(Y,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(Y,F)	1	3
TLP781F(YH,F)	TLP781F(YH,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(YH,F)	1	3
TLP781F(YH-LF7,F)	TLP781F(YH-LF7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(YH-LF7,F)	1	3
TLP781F(YH-TP7,F)	TLP781F(YH-TP7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(YH-TP7,F)	1	3
TLP781F(Y-LF7,F)	TLP781F(Y-LF7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(Y-LF7,F)	1	3
TLP781F(Y-TP7,F)	TLP781F(Y-TP7,F)	Oct 2019	Dec 18, 2020	Mar 30, 2021	TLP785F(Y-TP7,F)	1	3