

**= Preliminary =****AK2550****1ch Anode Common LDD with APC****1. General Description**

AK2550 is the single channel anode common LDD (Laser Diode Driver) suitable for MFP (Multi-Function Printer) and LBP (Laser Beam Printer).

AK2550 equips the LDD switching the LD (Laser Diode) current, and the feed-back APC (Auto Power Control) maintaining the optical LD power constant with monitoring the PD (Photo Diode) current (I_{pd}) and adjusting the operation current (I_{op}) for the LD.

AK2550 is applicable to the system which power supply voltage is 3.3V [Typ.] or 5V [Typ.].

2. Features

- 1ch Anode Common LDD:
Supplying the bias current (I_{bias}) and the switching current (I_{sw})
- Feed-Back APC (APC_FB):
Maintaining the optical LD power constant with monitoring PD current (I_{pd}), and adjusting LD current (I_{op}) by the control for I_{bias} or I_{sw}
- Error Detection:
Detecting the power supply voltage (LVDD) dropping, the excessive LD current output and the disconnection on LVDS lines
- Power Supply Voltage:
3.3V \pm 5% or 5V \pm 5%
- Package:
20pin QFN with the exposed pad

3. Block Diagram

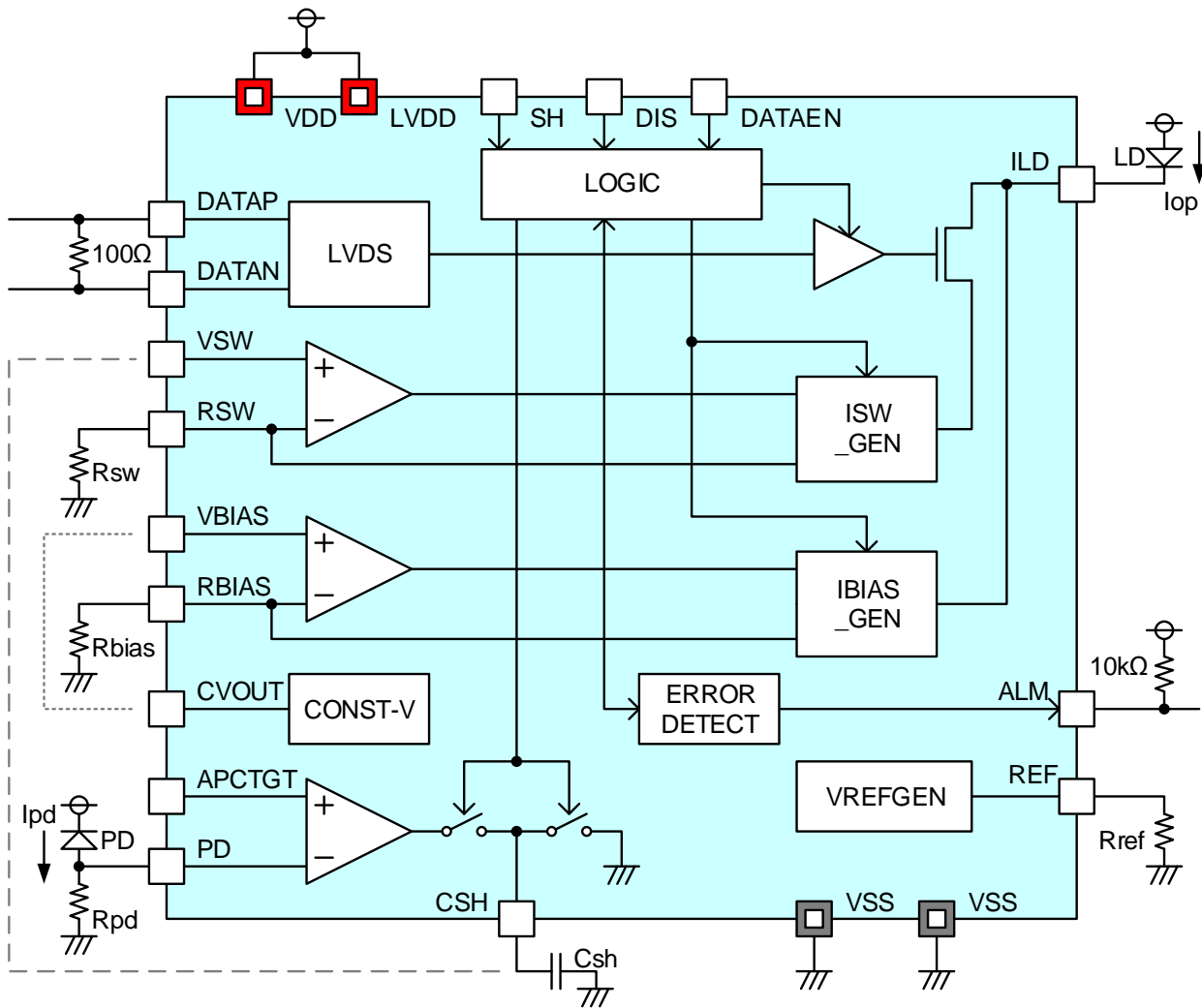
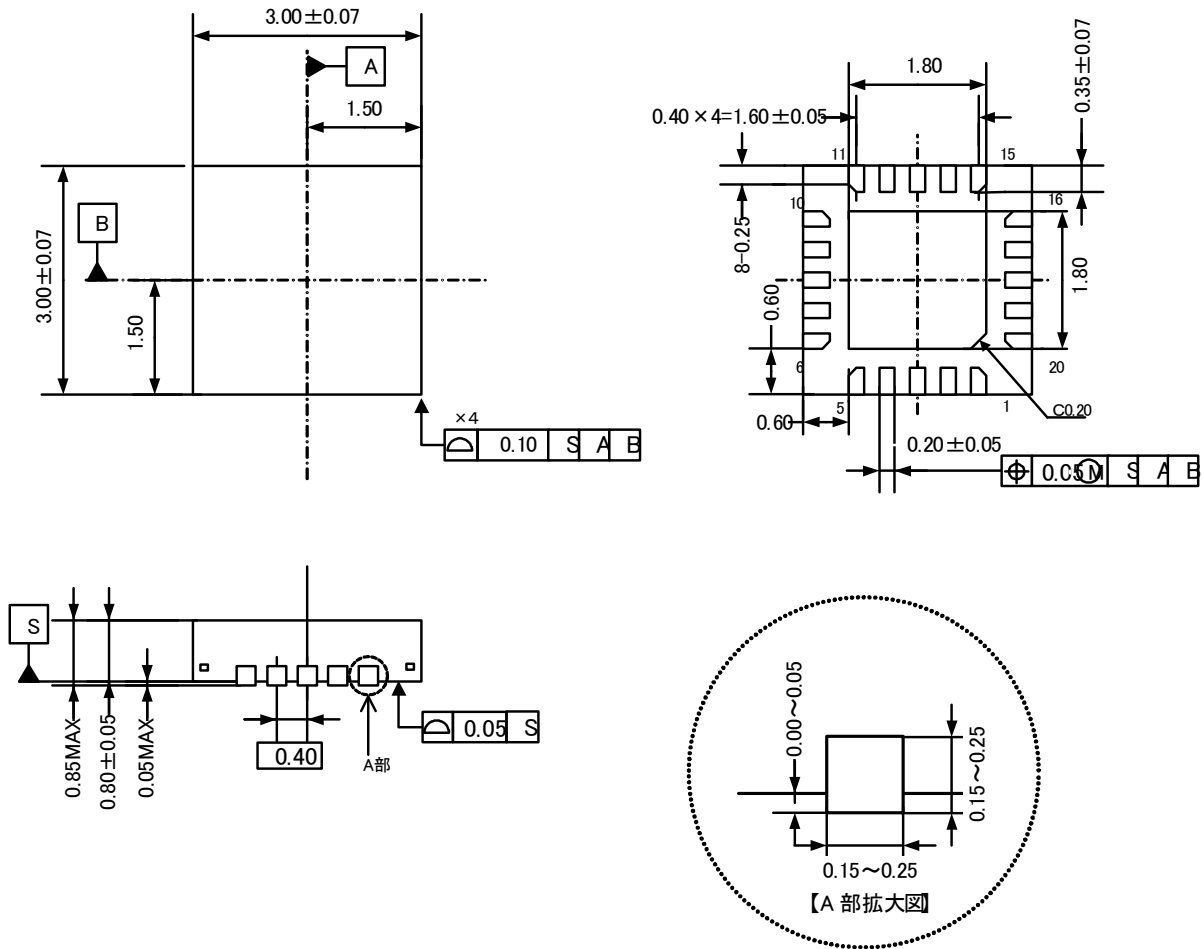


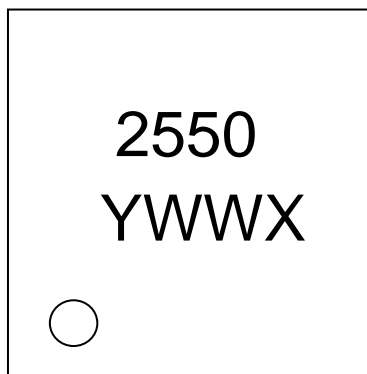
Figure 3-1 AK2550 Block Diagram

4. Package

4.1. Outline Dimensions



4.2. Marking



- a. Pin#1 Index: O
- b. Marking: 2550
- c. date code: YWWX (4 Digits)
 - Y: Year
 - WW: Week (1~52)
 - X: Administration code

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