Type-C USB 3.1 Gen 1 and DisplayPort V1.2 Combo Redriver

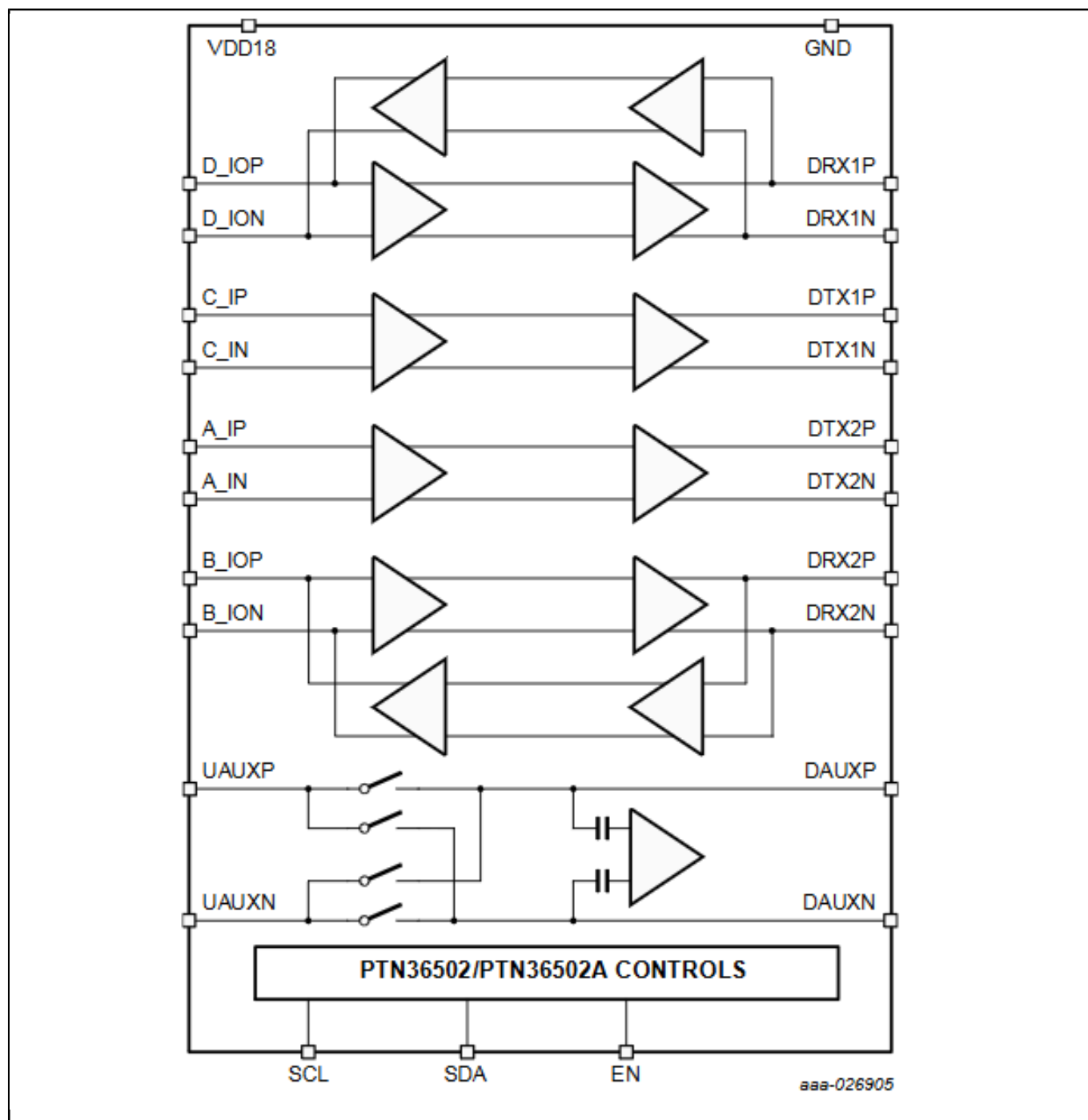## PTN36502

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PTN36502 is a Type-C USB 3.1 Gen 1/ DP1.2 combo redriver that is optimized for USB 3.1 Gen 1 and DisplayPort applications on either the Downstream Facing Port (DFP) or Upstream Facing Port (UFP) by following the four high-speed differential data flow to extend the signal reach.

PTN36502 addresses high-speed signal quality enhancement requirements for implementation of a USB Type-C interface on a platform that supports the VESA DisplayPort Alt Mode Standard v1.0a, which includes a DisplayPort Branch or Sink function.

PTN36502 has built-in advanced power management capability that enables significant power saving under USB 3.1 Gen 1 Low power modes (U2/U3). It can detect LFPS signaling and link electrical conditions and can dynamically activate/de-activate internal circuitry and logic.

PTN36502 is powered by a 1.8 V supply and it is available in a small thin HX2QFN24 package with 2.4 mm x 3.2 mm x 0.35 mm and 0.4 mm pitch.

PTN36502 Block Diagram

VDD18   GND

D_IOP   DRX1P
D_ION   DRX1N

C_IP   DTX1P
C_IN   DTX1N

A_IP   DTX2P
A_IN   DTX2N

B_IOP   DRX2P
B_ION   DRX2N

UAUXP   DAUXP
UAUXN   DAUXN

PTN36502/PTN36502A CONTROLS

SCL   SDA   EN

aaa-026905

View additional information for Type-C USB 3.1 Gen 1 and DisplayPort V1.2 Combo Redriver.

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