The EL7457 is a high speed, non-inverting, quad CMOS driver. It is capable of running at clock rates up to 40MHz and features 2A peak drive capability and a nominal on-resistance of just 3Ω. The EL7457 is ideal for driving highly capacitive loads, such as storage and vertical clocks in CCD applications. It is also well suited to ATE pin driving, level-shifting, and clock-driving applications.

### Key Features
- Clocking Speeds up to 40MHz
- 4 Channels
- 12ns tr/tf at 1000pF CLOAD
- 1ns Rise and Fall Time Match
- 1.5ns Prop Delay Match
- Low Quiescent Current – <1mA
- Fast Output Enable Function – 12ns
- Wide Output Voltage Range
  - 8V ≥ VIL ≥ -5V
  - -2V ≤ VIH ≤ 16.5V
- 2A Peak Drive
- 3Ω On Resistance

### Application
- CCD Drivers
- Digital Cameras
- Pin Drivers
- Clock/Line Drivers
- Ultrasound Transducer Drivers
- Ultrasonic and RF Generators
- Level Shifting

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### High Speed Driver Product Portfolio

<table>
<thead>
<tr>
<th>Device</th>
<th># of Drivers</th>
<th>VIN (max) (V)</th>
<th>Max Operating Frequency (MHz)</th>
<th>Peak Output Current (IPK) (A)</th>
<th>Rise Time (ns)</th>
<th>Fall Time (ns)</th>
<th>Turn On Delay (ns)</th>
<th>Turn Off Delay (ns)</th>
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### 40MHz Non-Inverting Quad CMOS Driver

The EL7457 is a high speed, non-inverting, quad CMOS driver. It is capable of running at clock rates up to 40MHz and features 2A peak drive capability and a nominal on-resistance of just 3Ω.

The EL7457 is ideal for driving highly capacitive loads, such as storage and vertical clocks in CCD applications. It is also well suited to ATE pin driving, level-shifting, and clock-driving applications.

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### Block Diagram

![Block Diagram](image-url)
High Performance Pin Driver

The EL7155 high performance pin driver with 3-state is suited to many ATE and level-shifting applications. The 3.5A peak drive capability makes this part an excellent choice when driving high capacitance loads. The EL7156 adds a lower supply pin $V_S$- and makes $V_L$ an isolated and independent input.

Key Features
- Clocking Speeds up to 40MHz
- 15ns tr/τf at 2000pF $C_{LOAD}$
- 0.5ns rise and Fall Times Mismatch
- 0.5ns $T_{ON}$-$T_{OFF}$ Prop Delay Mismatch
- 3.5pF Typical Input Capacitance
- 3.5A Peak Drive
- Low On Resistance of 3.5Ω
- Operates from 4.5V up to 16.5V

Quad Driver

**ISL55100A/B**

Quad 18V Pin Electronics Driver/Window Comparator

The ISL55100 is a Quad pin driver and window comparator fabricated in a wide voltage CMOS process. It is designed specifically for Test During Burn In (TDBI) applications, where cost, functional density, and power are all at a premium.

Key Features
- Low Driver Output Resistance
  - $R_{OUT}$ Maximum: ISL55100A 7.0Ω
  - $R_{OUT}$ Maximum: ISL55100B 14Ω
- 18V I/O Range
- 50MHz Operation
- 4-Channel Driver/Receiver Pairs with Per Pin Flexibility
- Dual Level - Per Pin - Input Thresholds
- Differential or Single-Ended Digital Inputs
- User Defined Comparator Output Levels
- Low Channel-to-Channel Timing Skew

Application
- Burn-in ATE
- Wafer Level Flash Memory Test
- LCD Panel Test
- Low Cost ATE
- Instrumentation
- Emulation
- Device Programmers

Functional Block Diagram

**Quad - Wide Range, Low Rout, Tri-Stateble - Drivers**

**Quad - Dual Level Comparator - Receivers**