

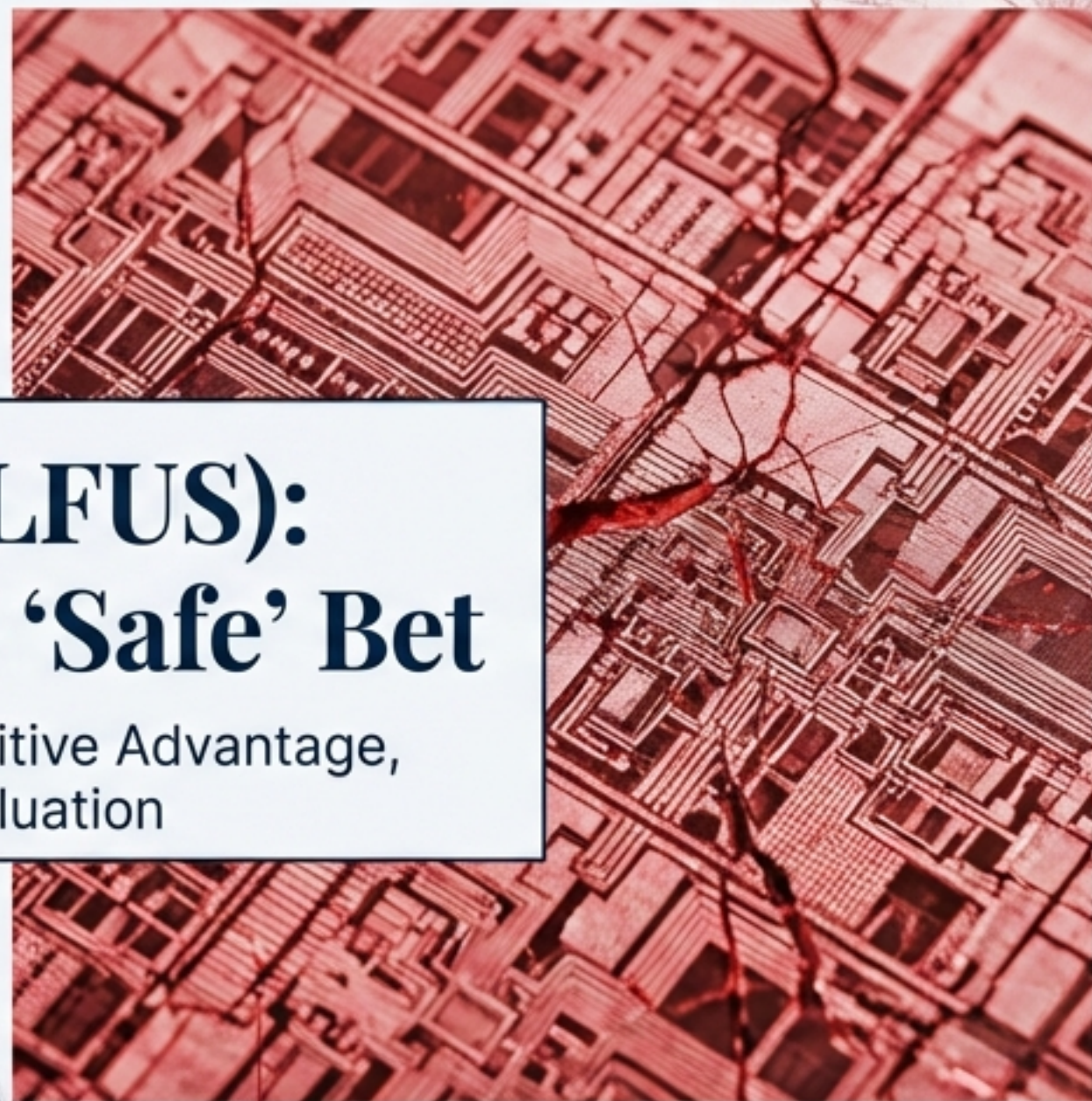


The Fortress

The Breach

Littelfuse Inc. (LFUS): The Paradox of the 'Safe' Bet

An Investment Analysis of Competitive Advantage,
Capital Allocation, and Valuation



Failure Analysis

Failure Analysis

Dietrose Analysis Annotation

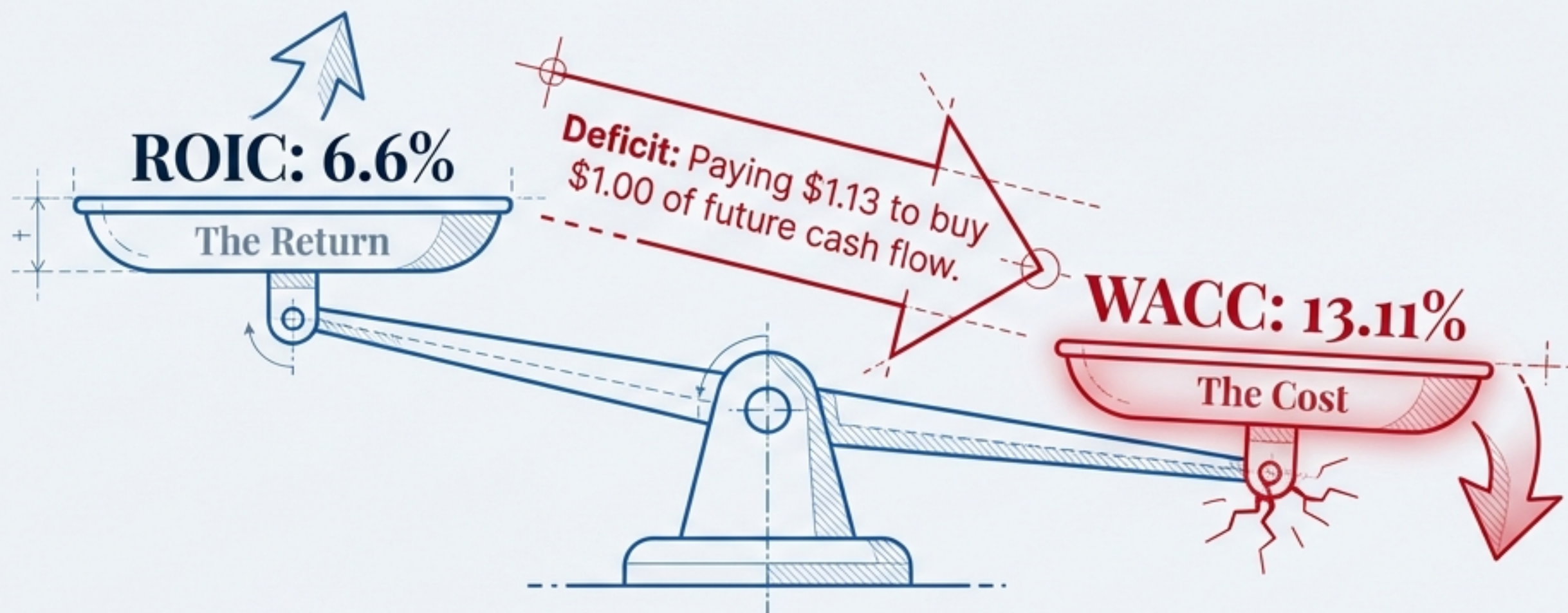
Initiation: **NEUTRAL**

Price Target Context: Overvalued
at ~27x Forward P/E (Non-GAAP)

Date: Early 2026

LFUS (NASDAQ) | Market Cap: ~\$8.5B | Sector: Electronic Components

The Value Destruction Warning: Growth Without Economic Spread



The Fortress (Moat)



A century of dominance in circuit protection. High switching costs and regulatory lock-in ensure steady cash flows.

The Breach (Risk)



Dilutive M&A (IXYS) and "diworsification" into commodity semiconductors led to a \$301M Goodwill Impairment in Q4 2025.

The Market Disconnect

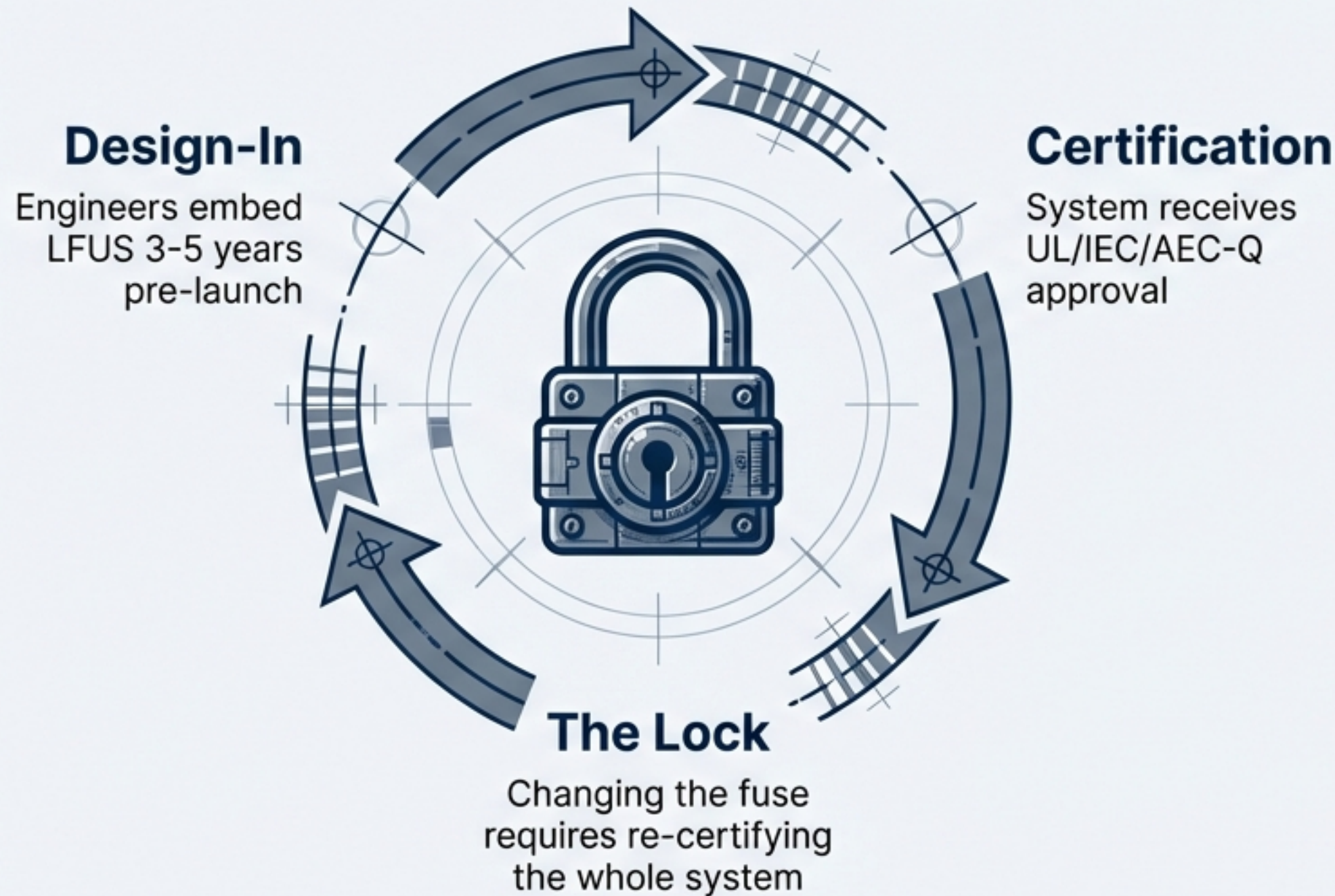


Stock at all-time highs (~\$350) driven by an "AI/Data Center" narrative that ignores the capital efficiency crisis.

VERDICT: NEUTRAL. Great business, **bad capital allocation.** Wait for ROIC inflection.

The Fortress: A Century of Institutional Memory

THE CERTIFICATION TRAP



Key Insight

“Costs pennies, protects millions.”

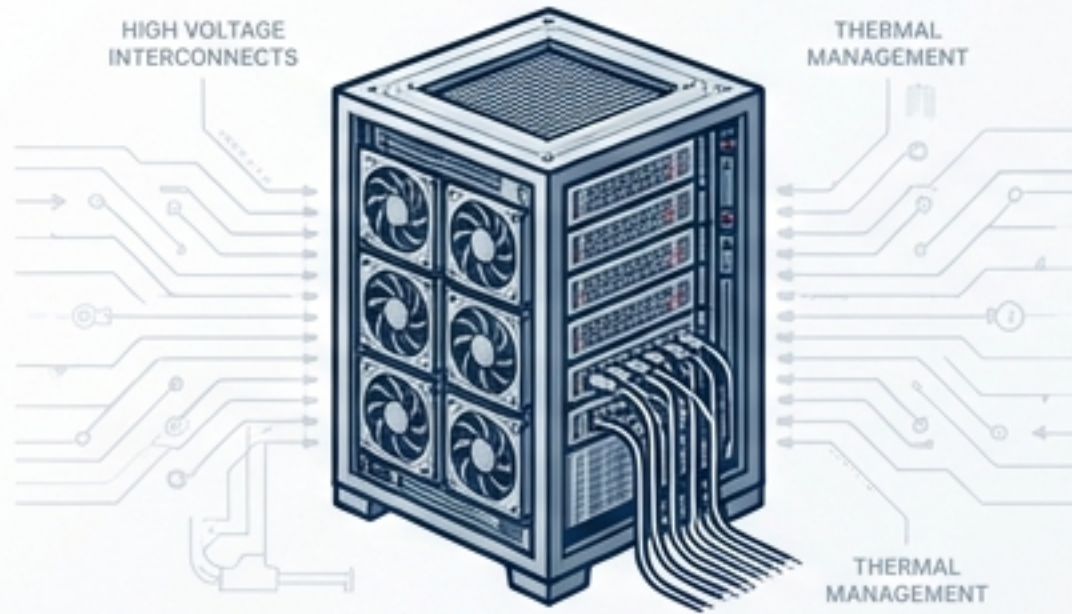
A fuse is a non-discretionary component. Whether in a 1920s meter or a 2026 AI server, the liability of failure outweighs the cost of the part. No engineer gets fired for specifying Littelfuse.

Market Position: Dominant Share in Auto (Blade Fuses) & Electronics

The Secular Tailwinds: AI, EVs, and the Physics of High Voltage

Pillar 1

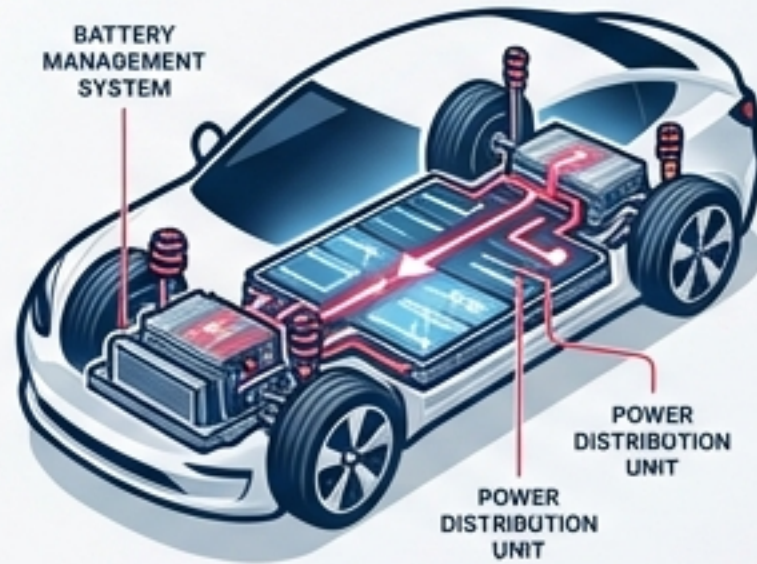
Data Center AI



- **Context:** AI racks (e.g., Nvidia GB200) consume **100kW+**.
- **Shift:** Move to **400V/800V DC** requires specialized arc suppression.
- **Data:** Electronics segment organic growth **+14%** in Q4 2025.
- **Metric:** Content per rack up **2x-4x**.

Pillar 2

Electric Vehicles



- **Context: The Volume Driver.**
- **Metric:** Content jumps from \$10 (ICE) to **\$30-\$50 (EV)** per vehicle.
- **Tech:** Pyrotechnic switches for **800V** battery disconnects.

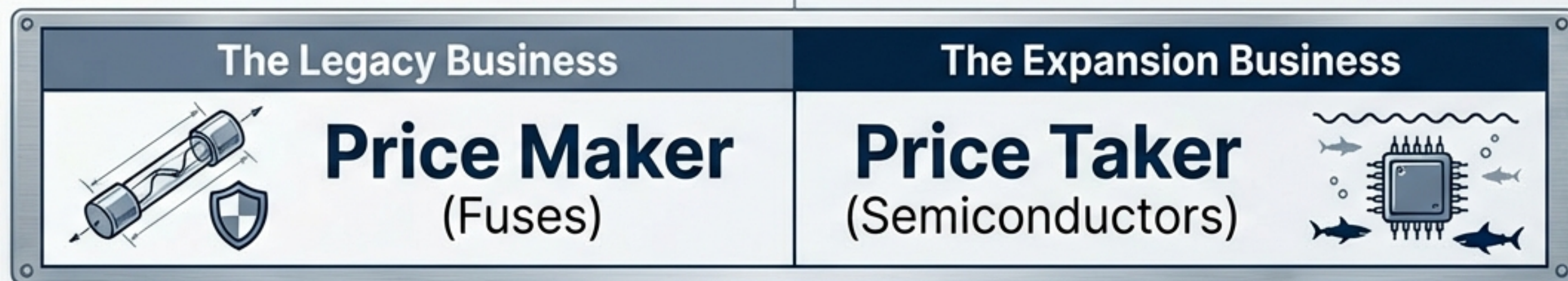
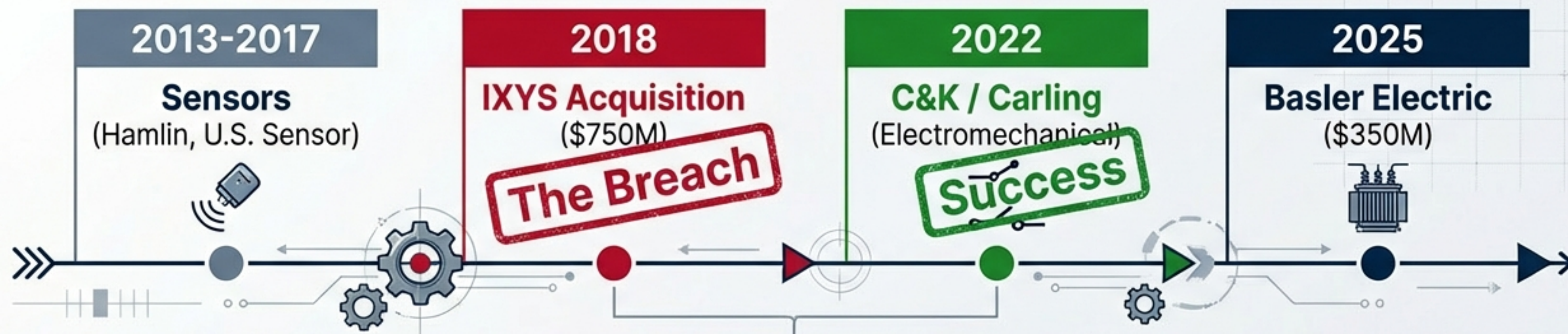
Pillar 3

Industrial & Renewables



- **Context: Grid modernization** and **BESS** (Battery Energy Storage).
- **Data:** Industrial segment grew **10%** in 2025.

The Strategic Pivot: Wandering 'Beyond the Fuse'



Strategic Error: Management sought to transform into an "Industrial Tech" conglomerate but diluted the moat by entering the "Shark Tank" of semiconductors against giants like Infineon and ON Semi. Long-term organic CAGR is only **2-3%** (vs target 5-7%) when stripping out M&A.

Anatomy of a Failure: The IXYS Acquisition Case Study

The Deal (2018)

- **Price:** \$750 Million
- **Objective:** Enter active power control market.
- **Thesis:** Synergies and cross-selling.

The Reality

- Lack of manufacturing scale vs. competitors.

The Reality

- **Lack of manufacturing scale** vs. competitors.
- **Commoditized products (MOSFETs/IGBTs)** exposed to brutal cyclicality.

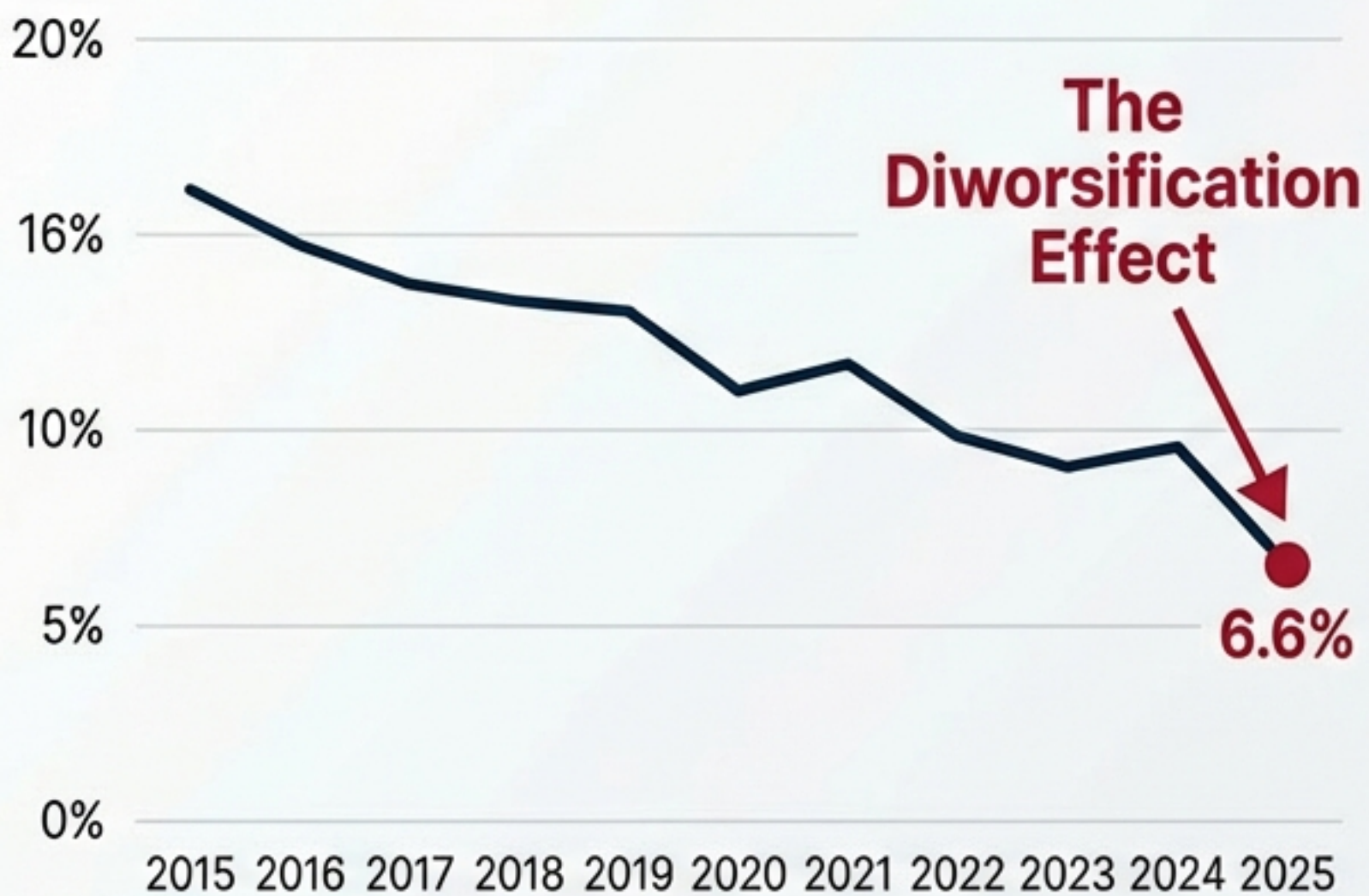
The Verdict (Q4 2025)

- **\$301 Million** Non-Cash Goodwill Impairment.
- **Takeaway:** This charge is an **admission that the deal failed** to meet return hurdles. It is the **primary drag on firm-wide ROIC**.

IMPAIRED

Financial Forensics: The ROIC Crisis

Historical ROIC Trend (2015–2025)



The Cost of Capital (WACC) Calculation

Risk-Free Rate	4.2%
Beta	1.43 (High Volatility)
Equity Risk Premium	6.0%
Calculated WACC	~13.1%

ROIC - **WACC** = **ECONOMIC SPREAD**

(6.6%) - (13.1%) = **-6.5%**

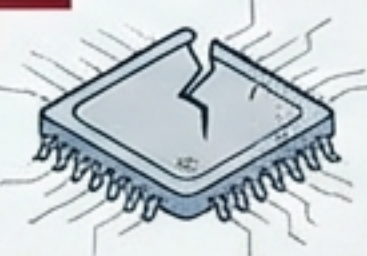
Capital Bloat: Invested Capital has ballooned to >\$4B due to accumulated goodwill (\$1.3B) from expensive acquisitions.

Operating Segments: A Tale of Two Cities

Electronics (~55% Rev)

The Mixed Bag

- **Passive (Fuses):** Booming. +23% organic growth driven by Data Center demand. High Margin. 

- **Active (Semis):** Drag on performance. Cyclical, commoditized, impairment-heavy. 

Transportation (~25% Rev)

The Resilient

- **Status:** Commercial vehicle headwinds (destocking) masked by EV content growth. 


- **Margin:** Maintained 16% EBITDA margins despite volume drops. 

Industrial (~20% Rev)

The New Core

- **Status:** Aligned with "Electrification of Infrastructure". 
- **Growth:** +10% in 2025 driven by BESS and Renewables. 

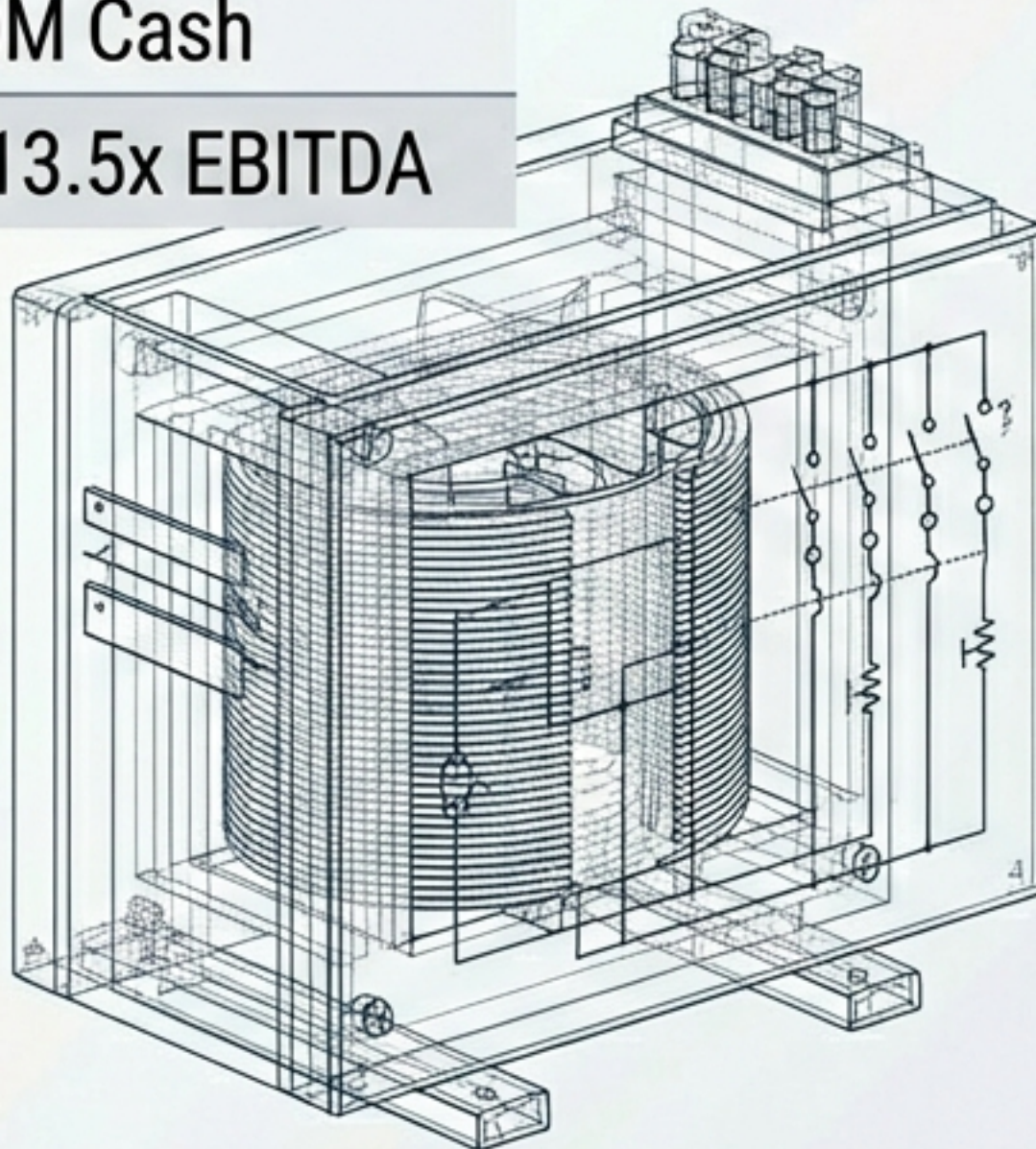
The New Bet: Evaluating the Basler Electric Acquisition

Fact Sheet

Acquired: Dec 2025

Price: ~\$350M Cash

Valuation: ~13.5x EBITDA



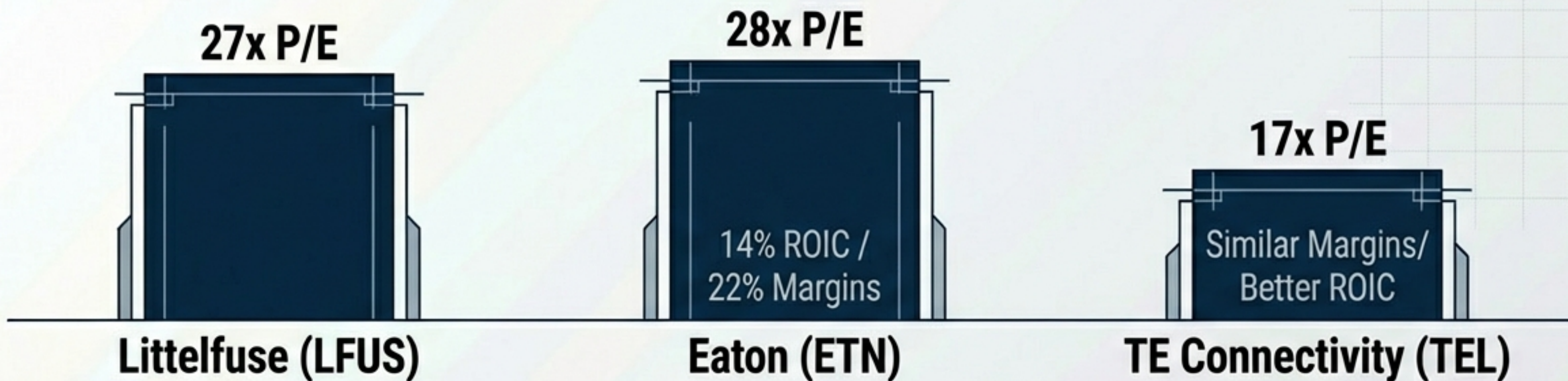
Strategic Fit

- **Better alignment:** Closer to core protection DNA than semiconductors.
- **Opportunity:** Cross-selling relays to existing utility fuse customers.

The Risk

- **Execution:** Must integrate disparate parts into a 'solution' to justify the premium.
- **Danger:** If integration fails, it becomes another layer of bloated capital.

Valuation: Pricing in a Reality That Hasn't Happened



LFUS trades at an Eaton Multiple with TE Connectivity Metrics.

Reverse DCF Analysis

Current Price: ~\$330/share

Implied Market Expectations:

10% CAGR for 10 years + ROIC expansion to 15%.

Actual Reality: ~2-3% organic CAGR and 6.6% ROIC.

**VALUATION
RISK GAP**

Management & Governance: Incentives vs. Execution



The Report Card

Strategy Grade: **C+**

Right macro themes (Electrification), wrong execution vehicle (Semis).

Capital Allocation Grade: **D**

\$301M impairment and ROIC significantly below WACC.

**IMPAIRMENT
BELOW WACC**

Governance Check

- **The Good:** ROIC is a metric in Performance Share Units (PSUs).
- **The Bad:** "Adjusted" metrics often add back restructuring costs, masking true inefficiency. High stock price currently masks underlying ROIC deterioration.

Final Verdict: The Moat is Real, but Expensive to Maintain

RECOMMENDATION: NEUTRAL

Investment Triggers

Bull Trigger (Upgrade to BUY)

1. Two consecutive quarters of ROIC inflection $>10\%$.
2. Successful divestiture of commodity semiconductor lines.

Bear Trigger (Sell)

1. Integration failure of Basler Electric.
2. Significant slowdown in Data Center build-outs.

“Littelfuse is a ‘Show Me’ story. The Fortress (Fuses) is secure, but the Breach (Semis) is draining value. Do not add new capital until the economic spread turns positive.”