



DYNAMIC EFFICIENCY

T U L A T E C H N O L O G Y



We Drive Efficiency
Patented Innovation



PLATFORM OF SOFTWARE SOLUTIONS TO IMPROVE EFFICIENCY

Innovative Silicon Valley software and controls company focused on improving energy conversion efficiency and reducing emissions

Dynamic Motor Drive (DMD)

Patented technology utilizing Tula's proven controls philosophy to maintain electric motor operation near peak efficiency applicable to transportation and industrial markets



Dynamic Skip Fire (DSF®)

Cylinder deactivation technology applicable across all internal combustion propulsion types, resulting in 7-15% reduction in fuel consumption

Diesel Dynamic Skip Fire (dDSF®)

Cylinder deactivation geared to commercial vehicles, generating up to a 5% reduction in CO₂ and as much as a 75% decrease in NO_x emissions



Visionary products recognized within both auto and technology sectors

DIVERSIFIED MARKET OPPORTUNITIES



	Global Vehicles (M)*			
	'21	'30	CAGR	
Electric Vehicles	3.2	26.0	26%	<ul style="list-style-type: none"> ✓ Rapidly rising EV penetration creates significant opportunity for DMD ✓ OEMs are working to optimize motor, battery, inverter strategies to reduce cost and increase range
Commercial Diesel	14.3	17.3	2.1%	<ul style="list-style-type: none"> ✓ Tightening global regulation of heavy-duty emissions ✓ Limited applicability of electrification to long-haul trucking ✓ dDSF value proposition will generate growth far above market
Passenger Cars w/ICE	84.8	81.8	(0.4%)	<ul style="list-style-type: none"> ✓ Sizable market for DSF as vehicles with IC engines will remain the largest share of the market for decades – 3x EV volume in 2030 ✓ Extended product life cycles will increase length of royalty stream for new DSF programs

*Sources: Bloomberg New Energy, IHS Markit and BCG respectively

OUR DIFFERENTIATION



Cutting edge, proven controls technology to improve propulsion efficiency and reduce emissions in a cost-effective manner



Software-based propulsion efficiency provides global OEMs with most cost-effective way to increase efficiency



‘Culture of Innovation’ with 340+ global patents (issued & pending) across all propulsion systems



Licensing model provides customer with most control while delivering long-term revenue stream from product life cycle



Top-tier management in **auto, commercial and industrial spaces**, with prestigious VC investors and strategic partners



Strong ESG element: delivering reduced energy dependence, lower emissions, and an improved carbon footprint

TULA'S CONTROLS TECHNOLOGY



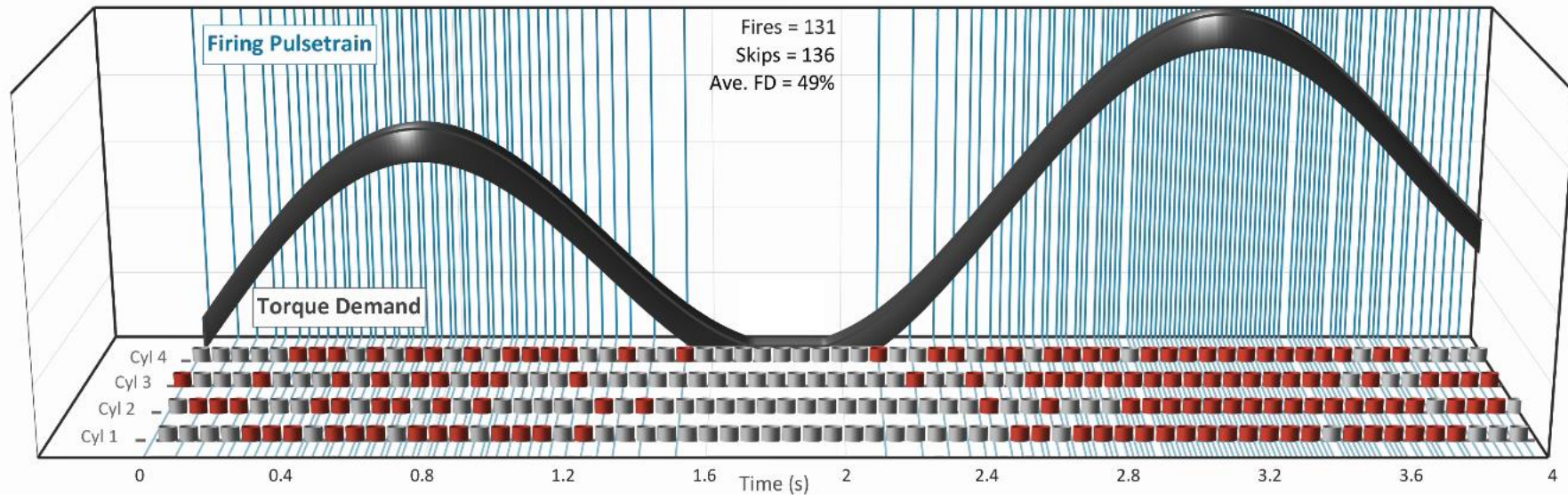
Proprietary algorithm
strategies integrated into
engine and motor controls

Identifies the sweet spot
of efficiency for every
powertrain technology:
gasoline, diesel, and EVs

Optimizes firing of
cylinders or pulsing of
motor to precisely match
driver's request for torque

Avoids noise and
vibration generation to
provide expected level
of refinement

DSF
DYNAMIC
SKIP FIRE



2019 SILVERADO V8 WITH DYNAMIC FUEL MANAGEMENT



**Proven technology with over 1,000,000
Tula-enabled, efficient vehicles on the road**



The 6.2L V-8 uses DFM to achieve a 1 mpg increase in fuel economy in the EPA city cycle and 2 mpg real world... Those MPG numbers are nothing to sneeze at, with the latter translating into more than a 13% gain in efficiency.



...the most impressive thing about the engine is the new Dynamic Fuel Management system.

– Road Show by CNET



...props to the Silverado's trick cylinder deactivation for putting the 6.2 ahead of a 3.5 liter in fuel economy, both with and without a trailer.

– Car and Driver



Industry first individual cylinder deactivation system.

– Engine Technology International



The (cylinder) shutdowns are so seamless, you can't tell how many are firing at any given time.

– Motor Trend

dDSF: DUAL BENEFIT TECH FOR COMMERCIAL VEHICLES



Commercial vehicles face increasing regulatory pressure to reduce CO₂ and NO_x emissions

- ✓ **dDSF lowers fuel consumption and dramatically reduces emissions:**
dDSF enables commercial vehicle OEMs to meet challenging global regulations, reducing fuel consumption and NO_x by up to 5% and 75%, respectively, with a durable solution
- ✓ **dDSF increases efficiency in cost-effective manner:**
Tula's dual benefit technology uses proven hardware and controls methodology to reduce total system oncost
- ✓ **Active collaboration with key players:**
Technology development with Cummins, a leading diesel OEM; actively engaged with OEMs around the world



““

Powertrain programs around the world are focused on electrification strategies. The idea of applying Dynamic Skip Fire to commercial trucks suggests that automakers and truckmakers see potential in working with internal combustion engines — diesel engines at that — to stake out fuel efficiency gains in the future.

— Automotive News

““

New stricter NO_x emissions regulations involving a challenging low-load test cycle are phasing in between 2024 and 2027 for which dDSF is doubly effective.

— MotorTrend

““

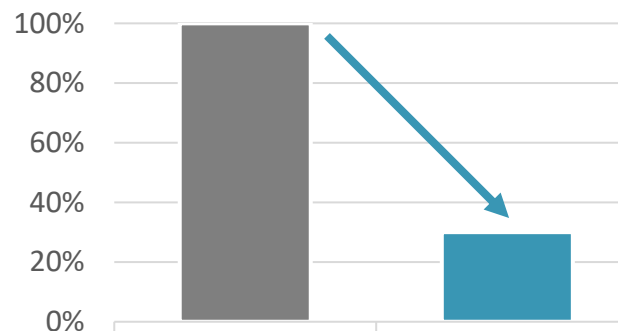
Diesel...fleets are interested in more than just fuel savings. That's where Dynamic Skip Fire, through its ability to increase fuel savings and lower emissions in larger diesel engines, can really shine.

— Hard Working Trucks

CUMMINS X15 EFFICIENCY SERIES WITH DIESEL DYNAMIC SKIP FIRE



65-75% Reduction in NO_x



The Tula-equipped X15 engine model addresses the most problematic emission challenge for diesel engines

DMD: IMPROVING TODAY'S MOTORS IN EV'S AND INDUSTRY

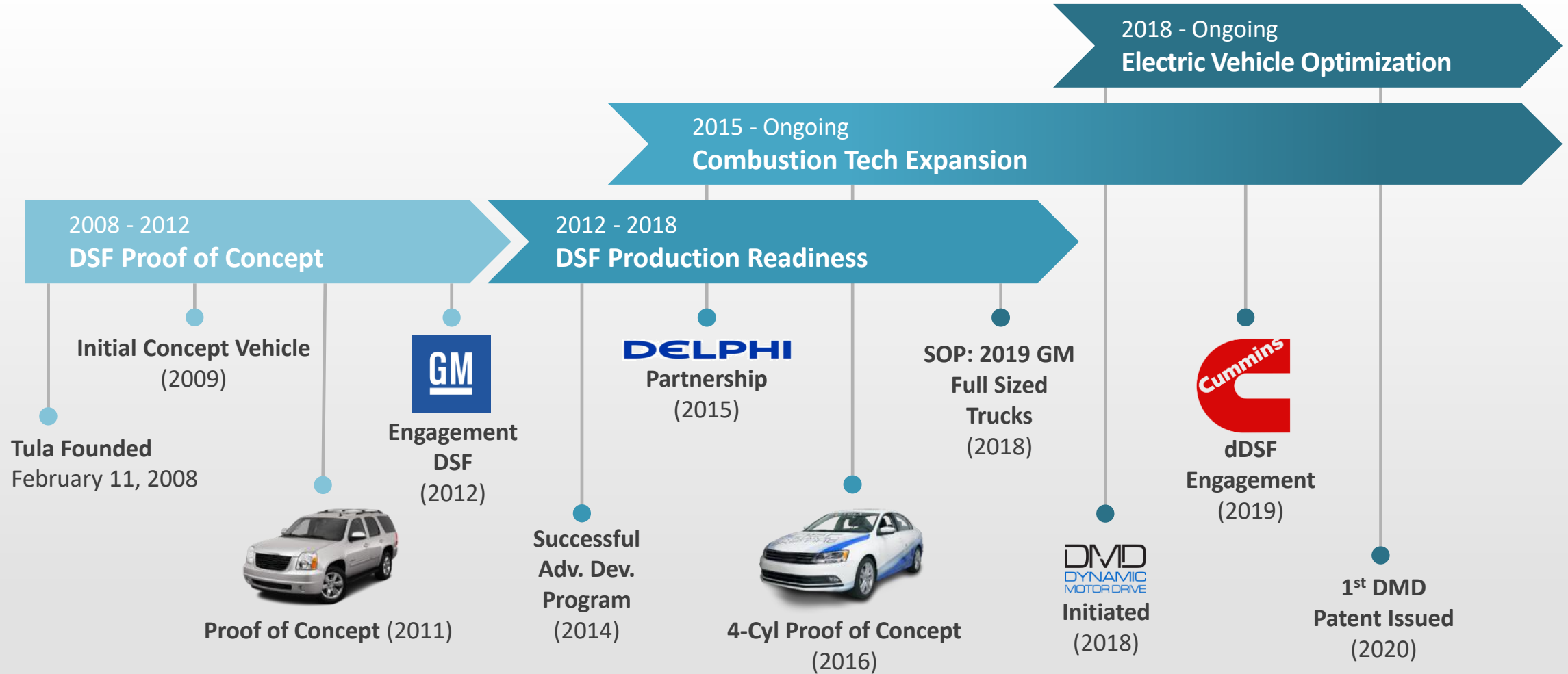


Enables greater range, lower cost, smaller battery

- ✓ **Operating at peak EV motor efficiency:** DMD extends high-efficiency motor operation so that most operation is close to peak efficiency
- ✓ **Flexibility to extend vehicle range or reduce battery size:** DMD allows an OEM to increase vehicle range, decrease the size and cost of battery packs, or increase performance
- ✓ **Software solution to deliver power and efficiency:** DMD software drives improved inverter efficiency, resulting in as much as a 5% better system efficiency, lowering the battery cost by up to \$500 per vehicle
- ✓ **Strong ESG:** Reduces rare earth materials by increasing system efficiency of non-rare earth motor technologies at an industry-leading value



TIMELINE



THE TULA TEAM

Bringing a
Silicon Valley
approach to solving
efficiency challenges

