

CHEVROLET CAMARO ZL1

New for 2014:

- New rear fascia and taillights
- Recaro performance front bucket seats on ZL1 coupe
- Color head-up display
- Color driver information center display
- Red Hot, Bright Yellow and Red Rock Metallic exterior colors

2014 CHEVROLET CAMARO ZL1 HAS REVISED LOOK, SAME UNCOMPROMISING CAPABILITY

Powered by the supercharged LSA small-block V-8 producing 580 horsepower (432 kW), the 2014 Camaro ZL1 it is the fastest, most capable Camaro ever, with performance credentials that include:

- 0-60 mph in four seconds
- Top speed of 184 mph
- 11-second quarter-mile ETs (11.93 with the automatic / 11.96 with the manual transmission)
- Lapped the Nürburgring in 7:41.27.

Few production cars can match the ZL1's performance, and all of its high-velocity achievements were conducted with a stock test vehicle wearing all the street-legal, factory-issued components – and no time-consuming equipment adjustments at the racetrack.

More than just power and raw numbers, the ZL1 features technologically advanced and highly developed chassis and suspension systems. They help it deliver balanced, track-ready handling and braking power to complement high engine output, and include third-generation Magnetic Ride Control.

The 2014 Camaro ZL1 is available in coupe and convertible models. Each wears a new rear fascia and taillights, like other 2014 Camaros, while retaining the purposeful front fascia developed for the unique airflow requirements for engine cooling, brake cooling and aerodynamic downforce.

Additional new features include available Recaro front sport seats, color driver information center and head-up display readouts and a trio of new exterior colors – Red Hot, Bright Yellow and Red Rock Metallic.

Downforce-optimized design

To maintain stability and steering response at the speed the Camaro ZL1 is capable of achieving, it features an aerodynamic design that generates downforce to press the tires against the track. The Camaro ZL1 produces 65 pounds of downforce at an equivalent 150 mph (241 km/h) – compared to 200 pounds of lift in a Camaro SS – which was offset by an increase of only 40 counts of additional aerodynamic drag.

Seven elements contribute to the downforce of the ZL1:

- **1. Front fascia** The front fascia channels air for engine and brake cooling. The corners of the front fascia were shaped to minimize lift, while brake-cooling ducts in the outer corners of the lower grille opening provide a direct, high-flow path to the brake rotors.
- **2. Hood** The ZL1's hood has a vented, carbon fiber insert, contributing to both engine cooling and aerodynamic downforce. The specially shaped vents draw air up through the engine bay allowing a significant volume of air flow while keeping the front tires firmly connected to the pavement.
- **3. Front splitter** Instead of a traditional front air dam, the ZL1 incorporates a racing-style splitter to help create downforce.
- **4. Front tire deflectors** The deflectors push airflow around the rotating wheels and tires more efficiently, reducing lift and drag.
- **5. Belly pans** The ZL1 has two of them: one beneath the engine cradle and one at the rear of the engine assembly, just in front of the transmission. They minimize airflow turbulence under the car. NACA-style ducts are incorporated into the rear belly pan for transmission cooling.
- **6. Rocker panels** Although subtle in appearance, the carefully shaped rocker panels help reduce lift and drag, while also contributing to stability during high cross winds. They also provide stone protection with the ZL1's wider tires.
- **7. Rear spoiler** The ZL1's rear spoiler, which contributes approximately 150 pounds of down force at the cost of only one count of drag. It is taller and wider than the Camaro SS spoiler and incorporates the center high-mounted stop lamp.

In addition to the functional design elements, the Camaro ZL1 offers several aesthetic options, including a bright-finish wheel package, exposed-weaver carbon fiber hood insert and a stripe package.

The exterior color palette for 2014 includes Red Hot, Bright Yellow, Red Rock Metallic, Silver Ice Metallic, Summit White, Black, Crystal Red Tintcoat, Ashen Gray Metallic and Blue Ray Metallic. The convertible top color choices include black and beige.

Camaro ZL1 convertible details

Because the Camaro's architecture was designed to accommodate a convertible model, it gives the ZL1 convertible coupe-like driving dynamics and performance capability. Four strategic reinforcements enhance the already-stiff body structure to quell the cowl and steering wheel shake common in convertibles. They include:

- A tower-to-tower brace under the hood
- A transmission support reinforcement brace
- Underbody tunnel brace
- Front "X" brace and stiffer cradle as well as rear underbody "V" braces.

Additional structural reinforcements in the ZL1 convertible are designed to improve noise and vibration characteristics, while also reducing unwanted ride and body motions. They include a hydroformed tube in the A-pillars, an inner reinforcement bracket in

Supercharged 'LSA' 6.2L V-8

Supporting the dynamic track and street performance of the ZL1 is the LSA 6.2L supercharged engine, which is rated at 580 horsepower (432kW) and 556 lb.-ft. of torque (754 Nm). The engine's bottom end uses six-bolt main bearing caps that clamp and lock in a forged steel crankshaft within a deep-skirt cylinder block. Additional features include:

- Balanced, lightweight reciprocating assembly
- High-strength hypereutectic pistons
- Sixth-generation Eaton supercharger with four-lobe rotors
- Piston oil squirters.

The 1.9L Roots-style blower uses an efficient four-lobe rotor set and compact intercooler to deliver boosted air into the high-flow cylinder heads. The engine also draws its breath through a unique induction system, with a low-restriction air filter, dual inlet paths and enhanced airflow through the supercharger housing.

Because the Camaro ZL1 uses electric power steering, the engine does not incorporate a conventional hydraulic power steering pump on its accessory drive system. This enhances performance, because no engine power is used to turn a steering pump pulley.

Track-capable manual and automatic transmissions

The ZL1 is offered with a six-speed manual or automatic transmission. The Tremec TR6060 "MG9" manual features 30 percent more torque capacity than in the Camaro SS. The higher torque capacity results from a strengthened output shaft, high-strength rear housing, and additional roller bearing. The MG9 has also been tuned for improved shift feel, with a dual-mass flywheel, twin-disc clutch, and triple synchros for smooth, precise shifts.

Similarly, the Hydra-Matic 6L90 automatic has been strengthened to handle the torque and horsepower produced by the 6.2L supercharged small-block. It features a strengthened input gearset with two additional pinion gears, additional clutch plate, and a strengthened output shaft and gearset. To make the ZL1 perform equally well on street and track, the 6L90 features three distinct drive modes:

- **Drive:** The shift pattern is calibrated for optimal fuel economy, including second-gear starts, while the shift feel is tuned for a smooth driving experience. Engaging the tap-shift feature on the steering wheel or shift lever engages temporary manual mode.
- Sport: The shift pattern is calibrated for more aggressing driving, including first-gear starts for maximum performance. The shift feel is also more aggressive, with a performance algorithm that holds the transmission in lower gears during aggressive driving.
- **Manual:** Here, the 6L90 offers the driver true manual control, with no automatic up shifts, and staged upshifts for incredibly fast shifts and maximum performance.

Track-ready features of the ZL1's powertrain include:

- An engine-oil cooler, identical to the system on the Corvette ZR1. The integral liquid-to-liquid system is so effective that both the manual and automatic transmissions are deemed to be fully track-capable with the standard factory-installed cooling package.
- A high-performance fuel system delivers fuel to the LSA engine under any performance driving condition. For example, the system features additional fuel pickups on the primary side, and the secondary fuel pickup is moved outboard for continuous fuel access during high-g cornering under low fuel conditions.

The Camaro ZL1 is also equipped with a dual-mode exhaust system, which alters the sound level and character in response to engine rpm and throttle position.

Chassis and drivetrain details

The drivetrain is unique to the Camaro ZL1 and is composed of a stronger driveshaft and rear axle system, featuring a larger, stronger 9.9-inch cast iron differential housing, stronger axles and heavy-duty limited-slip differential. This patent-pending system is designed to ensure that ZL1's tremendous power is delivered smoothly to the ground. A rear-differential cooler reduces temperatures in the differential by more than 100 F.

Asymmetrical half-shafts – a 60mm hollow shaft on the right and a 33mm solid shaft on the left – offer different torsional stiffness rates, which work with the limited-slip differential to minimize the chance of wheel hop on hard launches. Also, the rear stabilizer bar has drop links positioned outboard of the control arms, for more effective body roll control in turns, with crisp response to driver commands.

Camaro ZL1 features an advanced track-capable braking system, developed in conjunction with Brembo. Large 14.6-inch (370 mm) two-piece front rotors have six-piston calipers; the 14.4-inch (365 mm) rear rotors have four-piston calipers.

ZL1-specific 20-inch forged aluminum wheels, which are lighter than the 20-inch wheels used on the Camaro SS, are used with new Goodyear Eagle F1 Supercar G:2 tires developed specifically for the ZL1.

Performance Traction Management and Magnetic Ride Control

Performance Traction Management (PTM) is standard on the Camaro ZL1 coupe. It integrates the exclusive third-generation magnetic ride control – with driver-selectable Tour and Sport modes – launch control, traction control, electronic stability control and electric power steering response to enhance performance.

With PTM, the launch control feature (manual transmission only) automatically modulates engine torque for the best-possible acceleration without excessive wheel spin. When the driver pushes the throttle to the floor, the system holds a predetermined engine speed until the driver releases the clutch. Then, the system modulates engine torque 1,000 times per second to maximize the available traction. Similarly, on a road course, the driver can apply full throttle when exiting a corner and Performance Traction Management will automatically manage acceleration dynamics to maximize exit speed based on available traction.

Five PTM performance levels or modes are available to accommodate the given ambient and track conditions, driver experience/vehicle familiarity and driver comfort levels. They include:

- Mode 1 Traction control set for wet conditions, with stability control on and Magnetic Ride Control set on Tour.
- **Mode 2** Traction control set for dry conditions, with stability control on and Magnetic Ride Control set on Tour.
- Mode 3 Traction control set on Sport 1, with stability control on and Magnetic Ride Control set on Sport.
- Mode 4 Traction control set on Sport 2, with stability control off and Magnetic Ride Control set on Sport.
- **Mode 5** Traction control set on Race, with stability control off and Magnetic Ride Control set on Track. Launch control tuned for VHT-prepped drag strips.

Interior features

ZL1 is tailored for high-performance driving and is offered solely with a black interior. Heated leather seats with microfiber inserts and ZL1 logos embroidered on the front head restraints are comfortable and deliver the support required in high-load turns on a racetrack, with new Recaro performance front bucket seats available – including leather trim and microfiber inserts.

Microfiber suede is repeated as an accent on the instrument panel, adding a richer look to the interior. Additional interior features include a thick, flat-bottom steering wheel, alloy pedals, head-up display with unique performance readouts, a "four-pack" auxiliary gauge system featuring a boost readout, as well as:

- Unique instrument panel and door panel inserts; and ZL1-logo sill plates
- Color driver information display
- Color head-up display with unique g-force readout
- Short-throw shifter
- Steering wheel audio controls with Bluetooth capability
- Rear parking assist
- Rear camera system (displayed in the inside rearview mirror)
- Remote vehicle starter (available with automatic transmission).

A suede package, including suede microfiber accents on the steering wheel, shift knob and shift boot, is available, along with a power sunroof.

MyLink details

Camaro ZL1 includes new Chevrolet MyLink, which seamlessly integrates online services such as Pandora[®] internet radio and Stitcher SmartRadio[®] using hands-free voice and touch-screen controls via Bluetooth-enabled phones. MyLink adds stereo audio streaming and wireless control of smartphones, building on the voice-activated Bluetooth hands-free calling capability already offered in most Chevy vehicles.

MyLink features a high-resolution, full-color touch screen display designed to manage the number of steps required to complete a task. It also retains all the capabilities of conventional entertainment features, including AM/FM/Sirius XM tuners, CD player with MP3 playback, auxiliary and USB inputs.

Safety and crash-avoidance features

The Camaro ZL1 is designed to help drivers avoid crashes, while protecting occupants in the event a crash occurs. A strong body structure is designed to absorb crash energy and provide a protective "safety cage" around occupants. In fact, the 2012 Camaro was the first passenger car to receive NHTSA's revised quadruple 5-star safety rating.

Additional features include:

- Coupe models come with six standard air bags, including side curtain air bags, which
 provide head protection for outboard passengers in the event of a side-impact or rollover
 crash. Convertibles have four standard air bags.
- Rear Vision Package includes a rearview camera system to complement the rear park assist feature
- StabiliTrak electronic stability control system helps reduce the risk of rollover crashes by keeping the vehicle in the driver's intended path by applying throttle, braking or a combination of both
- Standard four-wheel disc brake system featuring smooth, quiet operation, longer pad life and more resistance to brake pulsation
- Pretensioners minimize forward movement during a collision, and are standard on the front safety belts. Load-limiting retractors cinch the belt more tightly
- Standard tire pressure monitoring system
- Standard remote keyless entry (RKE) system provides a second function for the red panic button. Drivers can use it to locate their cars without sounding the panic alarm.

Six months of OnStar Directions and Connections service is standard on Camaro ZL1. It uses GPS and cellular phone technology to automatically call for help in the event of crash. OnStar service also includes MyLink mobile apps, which offer vehicle information and OnStar services via the customer's smartphone.

2014 CHEVROLET CAMARO ZL1 SPECIFICATIONS

Overview

Model:	Chevrolet Camaro ZL1 coupe and convertible
Body style / driveline:	four-passenger, front-engine, rear-drive coupe
Construction:	unitized body frame, one- and two-sided galvanized steel
EPA vehicle class:	coupe
Manufacturing location:	Oshawa, Ontario, Canada
Key competitors:	Ford Mustang Shelby GT500

Engines

	LSA 6.2L Supercharged V-8
Displacement (cu in / cc):	376 / 6162
Bore & stroke (in / mm):	4.06 / 103.25 x 3.62 / 92 mm
Block material:	cast aluminum
Cylinder head material:	cast aluminum
Valvetrain:	overhead valve, two valves per cylinder
Fuel delivery:	1.9L supercharger with intercooler; sequential fuel injection
Compression ratio:	9.1:1
Horsepower (hp / kW @ rpm):	580 / 432 @ 6000 (SAE certified)
Torque (lb-ft / Nm @ rpm):	556 / 754 @ 4200 (SAE certified)
Recommended fuel:	premium required
Maximum engine speed (rpm):	6200

Transmission

	Tremec TR6060 six-speed manual	Hydra-Matic 6L90 six-speed automatic
Gear ratios (:1):		
First:	2.66	4.03
Second:	1.78	2.36
Third:	1.30	1.53
Fourth:	1.00	1.15
Fifth:	0.80	0.85
Sixth:	0.63	0.67
Reverse:	2.90	3.06
Final drive ratio:	3.73	3.23

Chassis / Suspension

Front:	double-ball-joint, multi-link strut; direct-acting stabilizer bar; progressive-rate coil springs; with Magnetic Ride Control
Rear:	4.5-link independent; progressive-rate coil springs over shocks; stabilizer bar; with Magnetic Ride Control
Steering type:	electric power steering with variable-ratio, variable-effort rack- and-pinion
Steering ratio:	16.1:1
Steering wheel turns, lock-to-lock:	2.5
Turning circle, curb-to-curb (ft / m):	37.7 / 11.5

Brakes

Dianos	
Type:	four-wheel disc w/ ABS; ventilated two-piece front and one-piece rear rotors; six-piston fixed Brembo aluminum front and four-piston rear calipers
Rotor diameter, front (in / mm):	14.6 / 370
Rotor diameter, rear (in / mm):	14.4 / 365
Rotor thickness, front (in /	1.26 / 32
mm):	
Rotor thickness, rear (in / mm):	1.1 / 28

Wheels / Tires

Wheel size and type:	20 x 10-inch aluminum (front)
	20 x 11-inch aluminum (rear)
Tires:	P285/35ZR20 summer (front)
	P305/35ZR20 summer (rear)

Dimensions

Exterior

Wheelbase (in / mm):	112.3 / 2852
Overall length (in / mm):	190.6 / 4841
Overall width (in / mm):	75.5 / 1918
Overall height (in / mm):	54.2 / 1376 (coupe)
	54.7 / 1389 (convertible)
Track, front (in / mm):	63.7 / 1618
Track, rear (in / mm):	63.7 / 1618
Curb weight (lb / kg):	4120 / 1869 (coupe - manual)
	4149 / 1882 (coupe – automatic)
	4374 / 1987 (convertible - manual)
	4403 / 1997 (convertible – automatic)
Weight balance (% front /	TBD
rear):	

Interior

Seating capacity (front / rear):	2/2
Headroom – coupe (in / mm):	front: 37.4 / 950
	rear: 35.3 / 897
Headroom – convertible (in /	front: 37.8 / 960
mm):	rear: 35.7 / 907
Legroom (in / mm):	front: 42.4 / 1077
	rear: 29.9 / 757
Shoulder room (in / mm):	front: 56.9 / 1444
	rear: 42.5 / 1080

Capacities

Cargo volume (cu ft / L):	11.3 / 320 (coupe)
	10.2 / 289 (convertible – top up)
Fuel tank (gal / L):	19 / 71.9
Engine oil (qt / L):	8.9 / 8.5

Note: Information shown is current at time of publication.