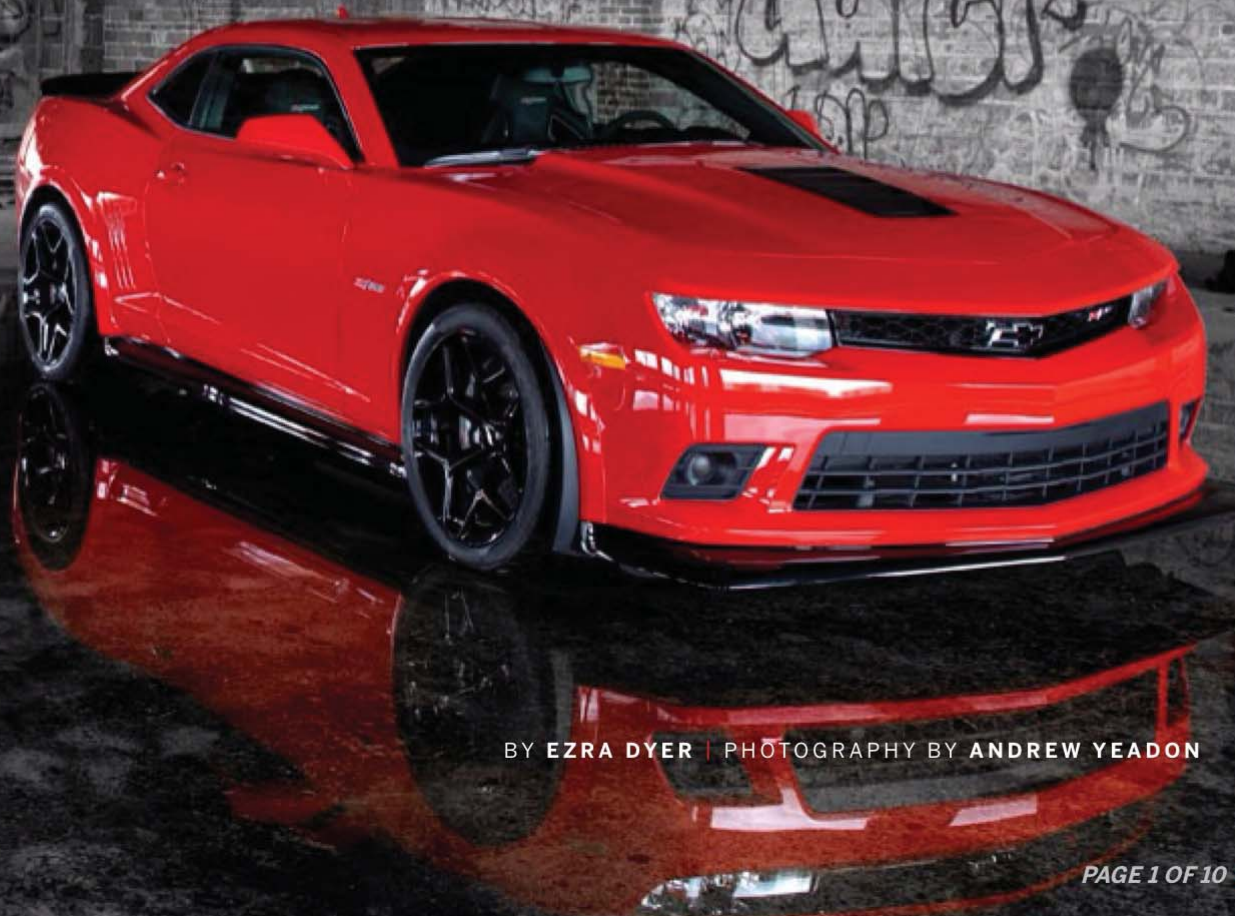


NEXT STORY >

# NO COMPROMISES

**THE CHEVROLET CAMARO Z/28  
IS NOT A CAR FOR THE COMMON MAN, BUT IT JUST MIGHT BE FOR YOU.**



BY EZRA DYER | PHOTOGRAPHY BY ANDREW YEADON

PAGE 1 OF 10 >



**GIVEN THE INTERNET ERA'S DEARTH OF SECRETS**, I didn't expect any surprises when I wandered down to Chevy's outpost at the far north end of the Javits Center at the 2013 New York Auto Show. But down in those doldrums, way in the back, an outrageous Camaro was dreamily spinning on a turntable. With carbon-ceramic brakes, near-slick tires, and the 7.0-liter

V-8 from the outgoing Corvette Z06, it looked like a fanciful SEMA-style concept. I asked a Chevy person what I was looking at and he replied, "That's the Z/28. We're gonna build it." I'm not sure I believed him.

There's a slim argument that the 2014 Z/28 picks up the thread of the road-race specials of the late 1960s, but that first-generation car was defined by its high-revving, 302-cubic-inch engine. The new Z/28 also has a healthy free-spinning V-8, but this isn't an SS with a Z06 engine dropped between the front struts. The LS7 isn't really the main attraction here. As its \$75,000 sticker price attests, the Z/28 aspires to greater feats than low elapsed times at the drag strip.

This, the new ne plus ultra of Camaros, is the most barbarically analog car on the street. It has the widest front tires on any production car, carbon-ceramic brakes that

would stop a runaway Kenworth, and aerodynamic tuning that generates 150 pounds of downforce at 150 mph. And, oh yes, there's that 505-hp, 7000-rpm Howitzer under the hood.

Chevy chose to debut its new toy in Birmingham, Alabama, where the weather is fine and the 2.4-mile road course at Barber Motorsports Park showcases chassis-tuning competence—or the lack thereof.

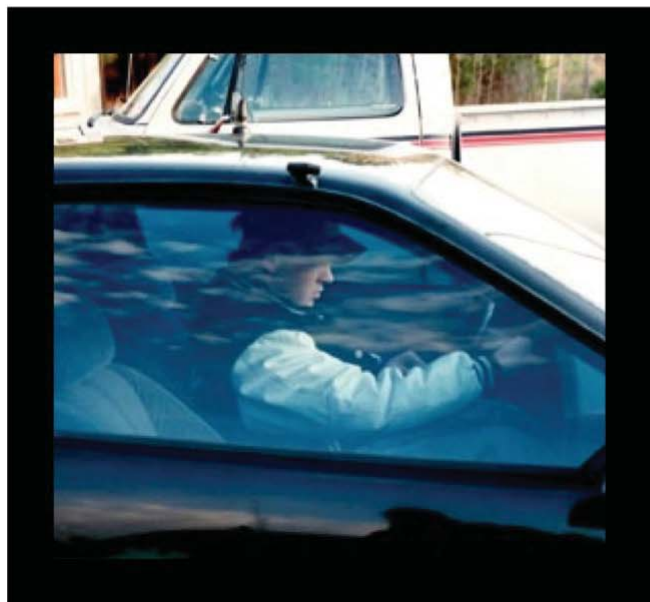




Alabama normally expects 60-degree highs in February, but the Z/28 arrived during a cold snap, with temperatures in the 30s. That weather inadvertently underscored the Z/28's biggest on-road liability: its tires. I found myself going sideways up an on-ramp while merely trying to keep pace with our Chevy Tahoe photo vehicle.

The Z/28 wears Pirelli PZero Trofeo R tires, sized 305/30YR-19 at all four corners. (The car might cost a lot, but at least you can rotate the tires.) Pirelli says that the Trofeo R has a ten percent bigger contact patch than a merely superaggressive summer tire in the same size. Where did that ten percent come from? Fill in the blanks. No, literally—fill in any negative





**Ezra and the Camaro** go way back. In fact, the very first article he ever wrote for Automobile Magazine was about his first car, a 1985 Camaro IROC-Z. We're taking this opportunity to reprint it from the December 2001 issue.

**THE IROC-Z**  
TAP TO VIEW

## FOR THOSE ABOUT TO 'ROC, I SALUTE YOU

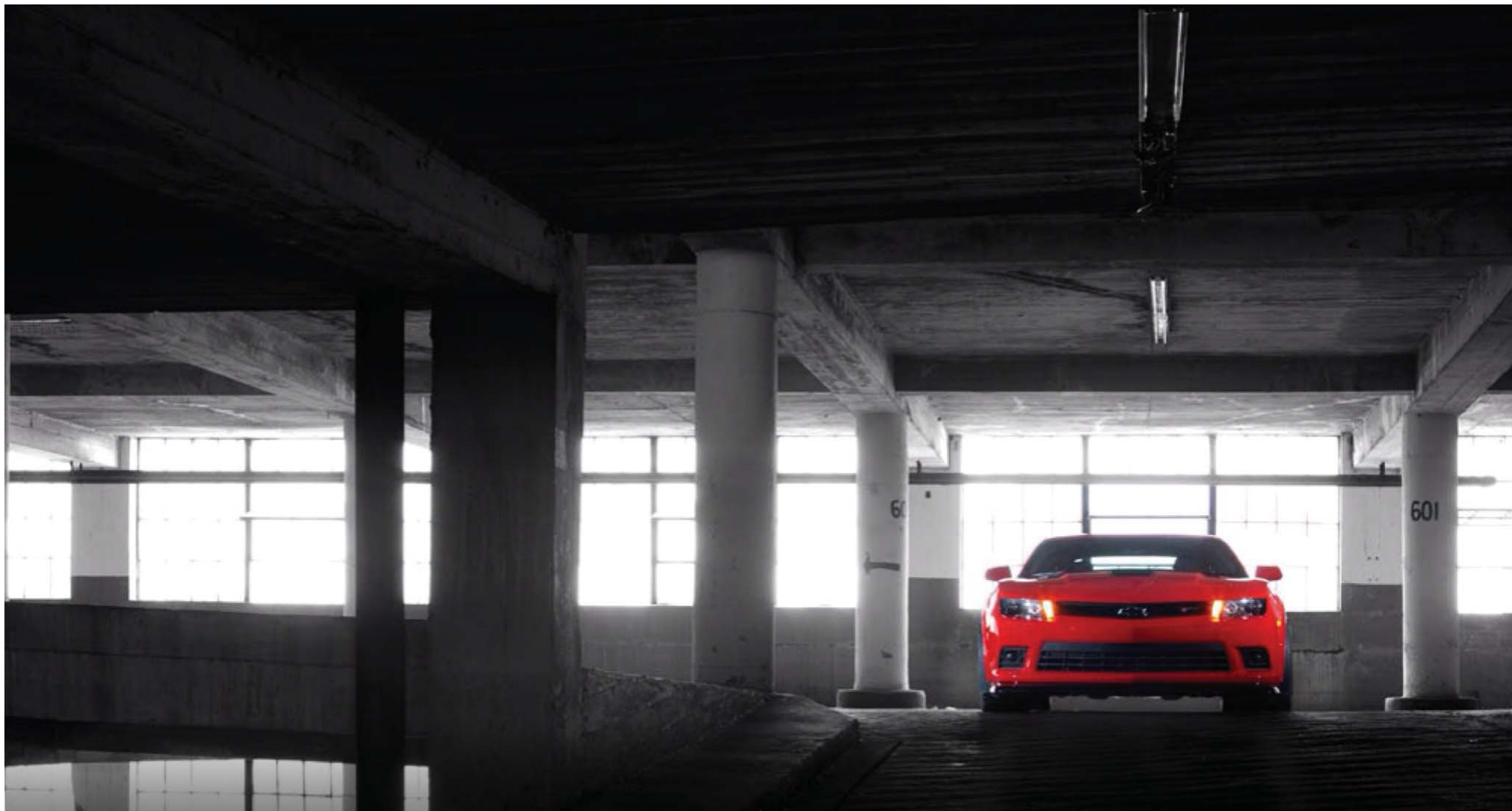
**My first car was a 1985 Camaro IROC Z/28.** This is not the type of information you want to share among unfamiliar company, lest you care to lob the conversational serve that will be smashed back with the inevitable *"IROC stands for Italian Retard Out*

space with rubber, then carve out the barest facsimile of a tread pattern and you've got a Trofeo R.

Like a convicted murderer, the Trofeo R should be kept off the street. Pirelli barely even claims this is a street tire, characterizing the Trofeo R as a dry-track racing tire that you can drive to and from your favorite road course. Pavement that is wet or cold or not part of a racetrack is not exactly a high priority, as I learned on that on-ramp. I'm no tire engineer, but I suspect that when the temperature is below 40 degrees, you might get better traction by driving on the rims.

You'll want to stay current on your AAA membership, as the Z/28 carries no tire-inflation kit, except in Rhode Island and New Hampshire, where state law requires one. (New Hampshire's libertarian streak evidently doesn't extend to the right to be stranded by the side of the road.)

When they're in their element, warm and happy, these Pirellis grip with such adamant determination that they actually create a whole different problem—tire slippage. That's when the tires dig in so hard that the rims spin but not the tires. Bill Wise, who tuned the chassis electronics (ABS, traction and stability control, and Performance Traction Management), was one of the engineers who perceived the slippage during testing. The solution was media-blasting the wheels to get a better seal at the bead.



Pair these supergooey tires with Brembo carbon-ceramic brakes, and you have the ingredients for 1.5-g stops with no fade, ever. The 15.5-inch front rotors are gripped by six-piston calipers, and the 15.3-inch rear rotors use four-piston calipers. Fun facts: the Z/28's front tires are wider than the rears on a Porsche 911 Carrera S, and its rear brakes are bigger than the fronts on a 911 GT3.

Of course, the Z/28 also weighs a lot more than a 911, which is why it requires such outsize hardware. General Motors shaved pounds here and there—48 pounds via the nineteen-inch forged wheels and ethereal Pirellis, 21 pounds through the carbon rotors, and about 10 pounds with the removal of sound deadening and insulation. (IT'S PRETTY LOUD IN THERE NOW!) The rear glass is 0.3-millimeter thinner, netting a weight reduction



that almost equals four iPhones. The standard sound system includes a single lonely speaker to bleat out the seatbelt chimes and the *thwock-thwock* sound of the turn signals. You know a Camaro is serious about performance when it surrenders its ability to crank Mötley Crüe.

Even after all this fettling, the Z/28 still weighs more than 3800 pounds—3820 pounds, to be exact, unless you want air-conditioning and a six-speaker stereo, which adds \$1150 to the price and 31 pounds to the curb weight. This is, after all, a Camaro, built on an inherently beefy platform that will surely enjoy a Cadillac-style diet on the next go-around. But for now, GM is limited to the swap-or-strip-out approach to weight loss.

Interestingly, the Z/28 retains a rear seat because the car is lighter with one than without. “The rear seat is part of the structure, so when you remove it you have to compensate with bracing,” says Al Oppenheiser, Camaro chief engineer. “You can easily end up with a car that’s heavier than it was when you started.” He’s not naming any names, Ford Mustang Boss 302 Laguna Seca.

Speaking of Mustangs, the Z/28 beats all of them around GM’s Milford Road Course. It also beats all other Camaros. And the new Corvette Stingray. To give you an idea of the Z/28 chassis’ capabilities, a Mustang Shelby GT500 goes into Milford’s turn 1 at 158.5 mph. The Z/28 manages only 149.7 mph by

THE Z/28 HAS NO BUTTON THAT ADJUSTS  
SUSPENSION SETTINGS. THERE IS ONE  
SETTING, CHOSEN BY PROFESSIONALS,  
**AND YOU WILL SHUT UP AND LIKE IT.**

the end of that straight, and yet it torches the GT500 by more than six seconds per lap.

I mentioned that the Z/28 foregoes the ZL1’s Magnetic Ride Control suspension. In its place is a system that the Camaro team seems even more excited about. It’s called DSSV, which stands for Dynamic Suspensions Spool Valve, made by a company called Multimatic. Thus far, Multimatic DSSV has only shown up on race cars (for instance, in Formula 1) and the Aston Martin One-77. I thought magnetic-fluid dampers were pretty much the bee’s knees of current suspension tech, but the wholly mechanical DSSV offers a couple of advantages. First, it’s lighter. Second, the spool valve’s ports can be fine-tuned to manage both big-hit impacts and longer-amplitude undulations. During development drives, GM engineers could sketch a graph of the vehicle-response curve they wanted to try, and within an hour Multimatic could machine new spools and put them to the test.

The Z/28 has no button that adjusts suspension settings. There is one setting, chosen by professionals, and you will shut up and like it. Hallelujah.



**ENGINE:** 10 valve 6.2L V-8

**DISPLACEMENT:**

7.0 liters (428 cu in)

**POWER:**

505 hp @ 6100 rpm

**TORQUE:**

481 lb-ft @ 4800 rpm

**TRANSMISSION:**

6-speed manual

**DRIVE:** Rear-wheel

**CHASSIS**

**STEERING:**

Electrically assisted

**FRONT SUSPENSION:**

Strut-type, coil springs

**REAR SUSPENSION:**

Multilink, coil springs

**BRAKES:** Vented carbon-ceramic discs

**TIRES:** Pirelli PZero Trofeo R

**TIRE SIZE:** 305/30R-19 (102Y)

**MEASUREMENTS**

**L x W x H:** 192.3 x 76.9 x 52.4 in

**WHEELBASE:** 112.3 in

**TRACK F/R:** 66.1/64.7 in

**WEIGHT:** 3820 lb

**EST. FUEL MILEAGE:**

15/22 mpg

**PERFORMANCE**

**0-60 MPH:** 4.0 sec

**1/4-MILE:** 12.3 sec @ 117 mph

**60-0 MPH BRAKING:** 97 ft



That default setting is stiff. In some cars, you can see the bumps but you don't really feel them. The Z/28 is the opposite. En route to the track, Alabama's pavement looks glassy smooth, but nervous jolts and jostles percolate up through the Recaros to inform you of everything that's happening down there on the pavement, a mere 3.5 inches below the catalytic converters. Compared with an SS, the front springs are 85 percent stiffer and the rears are 65 percent stiffer. To cope with the Z/28's 1.08-g cornering forces, bushings are all basically made of concrete—the rear upper-control-arm bushings are 400 percent stiffer.

With this bushel of information bouncing around in my skull, I don a helmet and ease out of pit lane to see how it all works at Barber. Earlier, Wise gave me a few acclimation laps in a Camaro 1LE, but he warned that the Z/28 would be a much different experience. "Give it at least a lap to warm up the tires," Wise said. "When they're cold they'll spin through second and third gears."

I gradually ramp up speed, moving through the Performance Traction Management system's five intervention thresholds as I do. The LS7 V-8 isn't as explosive here as it is in the much-lighter 2013 Z06, but it's still got plenty of torque to upset the rear end if you treat the throttle like an on/off switch. Caroming around Barber, I can feel the PTM cutting

in here and there, modulating torque to the Torsen rear differential. I'm learning where I'm too early with the throttle, without spinning into the wall in the process. This isn't what you'd call a friendly car, but I appreciate that small gesture toward driver preservation.

Besides, there's no shame in leaning on PTM. The Z/28 is the first car I can recall where the manufacturer flatly declares that its performance-enhancing electronics are better than the best driver. Even Ferrari leaves a little room for human flattery, insisting that a pro driver can beat Race mode by turning everything off. But Wise says that PTM Mode 5 is the quickest way around the track, period. It's going to parcel out the absolute most power the tires can handle, every single time, lap after lap. Turn it off and you'll go slower.

I can vouch that Mode 5 gives you a long leash. As I'm diving into a corkscrew with an inadvisable combination of trail braking and steering lock, the rear end starts coming around. (You know what you don't get with 305-section front tires? Understeer.) While Mode 5 will prevent you from power-oversteering off the track, it appears that you're on your own in off-throttle situations. The rear Pirellis scribe the signature of a trail-braking slide before I get it reined in and complete a chastened lap.

That experience sows enough self-doubt to neuter my attack of Barber's blind uphill right-hander ahead of the timing tower.



You can take this roller-coaster ascent at wide-open throttle, but you've got to have the car lined up perfectly before you crest the rise and the suspension unloads. I'm never that sure I've got it lined up.

For those who know their way around this track, the Z/28 offers two advantages at this particular spot. First, the aero package and its healthy downforce mean that at high speeds you actually have slightly better grip than you do in low-speed hairpins. Second, the suspension retains the ride-height sensors from the ZL1's magnetic system, so the car knows when it's launching airborne.

Why is that important? Because the ride-height sensors can enable "fly mode," wherein the suspension tells the traction-management system, "It's cool—you sense a loss of traction and want to cut power, but we're just flying through the air, good buddy. Keep piling on the juice so we don't slow down when we land." I mean, you don't want to dial back the power just because your car is no longer earthbound. That's pretty rock 'n' roll, Camaro.

Barber has a few constant-radius corners where I can push the limits of the Z/28's cornering abilities, which are completely neck-straining, stomach-punishing, and happily neutral. But I never quite master the brakes. Every time I'm going



**The front spoiler is massive,** which made it nearly impossible to drive down this steep ramp.

white-knuckle into a corner, certain that this time I've overdone it, the Z/28 simply hangs me against the shoulder belt with those 1.5-g Brembos, and it turns out that I braked too early. Again. Coming off the faster straights, I'm usually ready for the next corner about 100 feet before the turn-in point. I've





never driven a car with brakes like this, and my brain is just not calibrated. My lap times are about six seconds slower than the pros', and I'll wager that most of that is attributable to my inability to figure out when to brake in a car that seems to throw the universe in reverse.

Lucky for GM, I've got an easy solution: If the Z/28 had 600 or maybe 700 horses working on the straights, the braking points might be out where my brain says they should be. I'm sure nobody has yet mentioned this, but the Z/28 could probably handle a little more power.

This is a curious machine, the Z/28. Who'd have thought

that GM would emerge as the world leader in chassis tuning? This ultimate Camaro is the latest statement to that effect, loudly proclaiming that the masters of road-course wizardry work out of Milford, Michigan. First we had the Cadillac CTS-V, then the Camaro ZL1, then the C7 Corvette. Now a Camaro will beat a Lamborghini Murciélago around the Nürburgring.

The Z/28 is uncompromising in ways that will severely limit its appeal. It's also wonderful for all the same reasons. It's like a homologation special for a racing series that doesn't exist.

Hey, that gives me an idea. Who owns the rights to IROC these days? **AM**









Perf Traction

5 - RACE

Active Handling

Off

Chassis Mode

TRACK





























