

SURVEY: Interest in 42-Volt Enabled Tech

It may be four to 10 years before consumers enjoy the safety, performance and convenience benefits made possible by 42-volt systems, according to the Society of Automotive Engineers (SAE)/DuPont survey on Advanced Automotive Electrical/Electronic (AAEE) issues.

When asked about the timeline for 42-volt systems, 50% of respondents indicated the technology could arrive in North America within four to 10 years. Thirty-seven percent predicted availability in North America within the next four years and only 3% predicted it would take longer than 10 years. In addition to timing issues, the survey indicated OEMs and suppliers will need to address a range of challenges, making collaborations increasingly essential for success.

"It's becoming clearer that the industry consensus is not 'if' this transition will take place, but 'when' it will take place," said Jim Hay, DuPont's global director of the AAEE venture. "Considering this, we believe now is the time to be working together with our industry partners to deliver technological solutions that will enable a transition to 42-volt technologies by providing the benefits at an acceptable cost to consumers."

Not surprisingly, nearly 35% of respondents said cost is the leading factor in designing new AAEE systems. However, reliability came in a close second with 32%, demonstrating price is not the only measure of value.

Below is a breakdown of the survey results:

*Electronic Technologies ranked in their order of importance to consumers:

Ranking Technology - Percent

1	Safety	65.0
2	Telematics	27.4
3	Entertainment	17.9
4	42-volt systems	8.5
5	Alternative vehicles	4.7

*What is the most crucial design consideration for advanced electrical/electronic systems?

Ranking Consideration - Percent

1	Cost	34.6
2	Reliability	33.03
3	Harsh operating conditions	11.9
4	Higher voltages	6.5
5	Miniaturization	2.2

*What is the greatest challenge for materials in 42-volt systems?

Ranking Challenge - Percent

1	Electrical properties	44.3
2	Heat resistance	17.1
3	Dimensional stability	10.7
4	Strength	10.0
5	Other	8.6
6	Moisture resistance	5.0
7	Chemical resistance	4.3

Respondents to the SAE/DuPont survey on AAEE issues included OEM and supplier engineers in addition to those involved in software development, purchasing & buying, research & development and sales & marketing.