About **DIRECTV**: One of the world's leading providers of digital television entertainment services, DIRECTV is proud to be a Partner in the ENERGY STAR® Set-Top Box program. A Fortune 150 company with over \$27 billion annual revenue, DIRECTV launched its service in 1994 as a better alternative to cable and has led the industry with exclusive programming, Emmy-award winning technology and higher customer satisfaction than the leading cable companies for ten years running.

Past Success: DIRECTV stands alone among TV providers recognized by EPA, having received ENERGY STAR Awards in 2010, 2011 and 2012 for Excellence in Energy Efficient Product Design. Fully 99.9% of the more than 33 million DIRECTV set-top boxes deployed in 2009-2011 comply with Version 2.0 or 3.0 ENERGY STAR® guidelines. Using EPA metrics (footnote 1), energy savings from the receivers deployed in 2011 alone are more than 900 million kWh annually, or the electricity use of more than 70,000 homes (footnote 2). DIRECTV has achieved a dramatic reduction in receiver energy use from its first generation products: Standard Definition boxes' Typical Energy Consumption (TEC) has been reduced by 40%, High Definition boxes' TEC by 60%, and HD Digital Video Recorders' TEC by 30% (footnote 3).

Future Success: In congratulating DIRECTV for its 2012 Excellence Award, the US EPA's ENERGY STAR Product Labeling program director Ann Bailey stated "With this award, EPA is also recognizing DIRECTV's move towards receiver-less options for consumers-offering customers a household of content with one central DVR, eliminating the need for millions of energy using receivers. Your commitment distinguishes DIRECTV as an industry leader." DIRECTV merits consideration for ASE's Innovative Star of Energy Efficiency recognition due to its pioneering work in 2011 introducing a highly efficient next generation server-client DVR architecture, and its pivotal role as a founding member of the RVU Alliance, a consortium promoting the award winning RVU home networked television entertainment technology (www.rvualliance.org). DIRECTV's recently released model HR34 "RVU Server" combines with the "RVU Client" software built into all 2012 Samsung Smart TVs to allow the elimination of set-top boxes at each of TV, providing a further 30% or more reduction in energy consumption over previously available Whole-Home DVR solutions (footnote 4).

Conclusion: In an 8 September 2011 letter to TV providers, United States Senator Dianne Feinstein (D-California) wrote that "...improving consumer electronics efficiency is the single most cost effective means to reduce emissions in the United States" (footnote 5). DIRECTV has stepped up to this challenge, both as an ENERGY STAR partner and as a technology innovator.

Footnote 1: Based on EPA's guideline that ENERGY STAR STBs are at least 40% more efficient than conventional models. See:

http://www.energystar.gov/index.cfm?fuseaction=find_a_product.showProductGroup&pgw_code=ST. Footnote 2: Based on EPA's Greenhouse Gas Equivalencies Calculator available from:

http://www.epa.gov/cleanenergy/energy-resources/calculator.html. Footnote 3: DIRECTV presentation at California Plug Load Research Center 1 Feb 2012 STB Workshop, slide 10 (see

http://www.calplug.org/index.php/outreach/set-top-box-workshop). Footnote 4: DIRECTV presentation at Cal-Plug STB 1 Feb 2012 Workshop, slides 15-21. Footnote 5: See

http://www.feinstein.senate.gov/public/index.cfm/2011/9/feinstein-calls-on-cable-satellite-companies-to-offer-energy-efficient-boxes.