

The image shows the Keysight ADS Expression Editor interface. It features a top section for selecting signal types (e.g., vt, vf, vdc, vs, os, op, ot, mp, vn, sp, vswr, hp, zm, it, if, idc, is, opt, var, vn2, zp, yp, gd, data). Below this is a large text area for entering the signal expression. To the left of the expression area is a numeric keypad and a stack panel. At the bottom is a function panel listing various functions (e.g., PN, a2d, abs\_jitter, analog2Digital, average, bandwidth, busTransition, calcVal, clip, compare, compression, compressionVRI, convolve, cross, d2a, dBm, delay, delayMeasure, deriv, dft, dftbb, dni, dutyCycle, evmQAM, evmQpsk, eyeAperture, eyeDiagram, fallTime, firstVal, flip, fourEval, freq, freq\_jitter, frequency, gainBwProd, gainMargin, getAsciiWave, getData, groupDelay, harmonic, harmonicFreq, histogram2D, i, iinteg, inl, integ, intersect, ipn, ipnVRI, lastVal, loadpull, lshift, normalQQ, numConv, overshoot, pavg, peak, peakToPeak, period\_jitter, phaseMargin, phaseNoise, pow, prms, psd, psdbb, pstddev, pzcode, pzfilter, riseTime, rms, rmsNoise, rms\_jitter, root, rshift, sample, settlingTime, slewRate, spectralPower, spectrumMeas, stddev, swapSweep, tangent, thd, unityGainFreq, v, value, waveVsWave, xmax, xmin, xval, ymax, ymin).