

PGA855

Input and Output Range Design Calculator

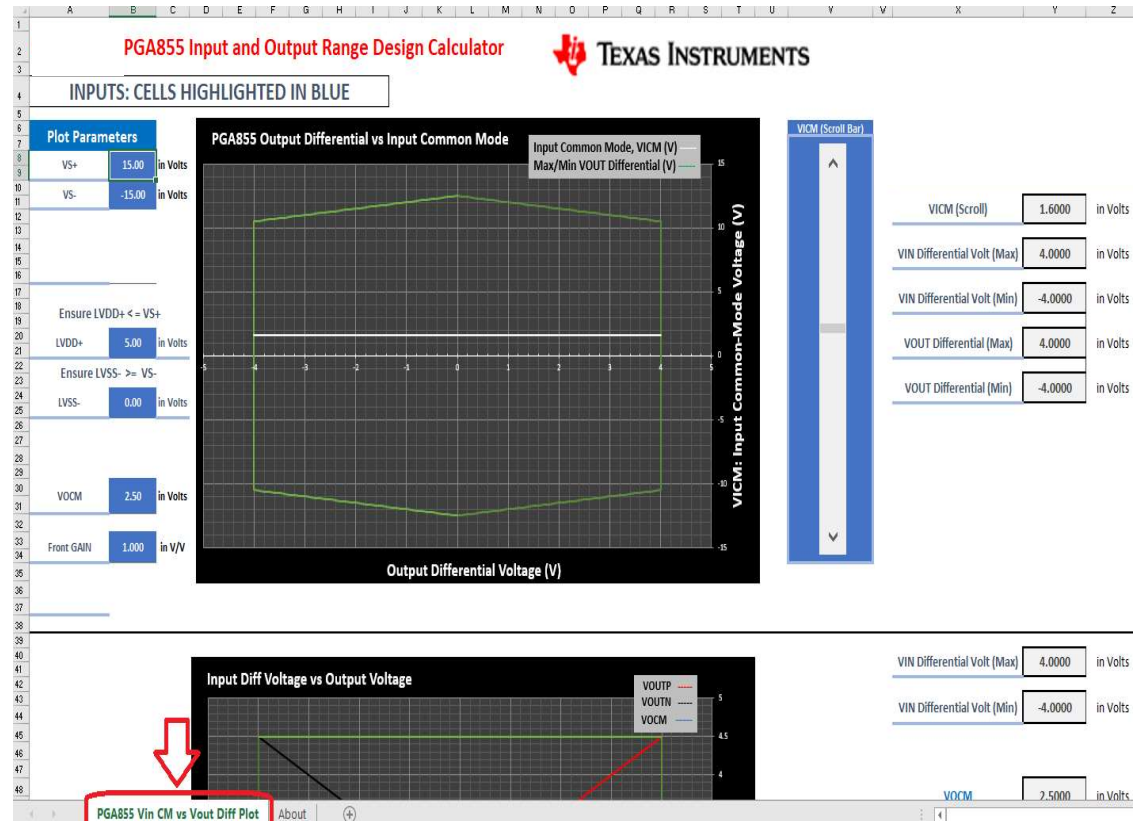
PGA855 Input and Output Range Design Calculator

“PGA855 Vin CM vs Vout Diff Plot”

On sheet:

“PGA855_Vin CM vs Vout Diff Plot”

- User fills the highlighted cells in blue.
- Required: Input supplies VS+, VS-, Gain, VOCM voltage, Output supplies LVDD+ and LVSS-
- The Operating Range Chart provides the valid input & output ranges for this Programmable Gain Amplifier. Use VICM to scroll bar to adjust the input common mode.



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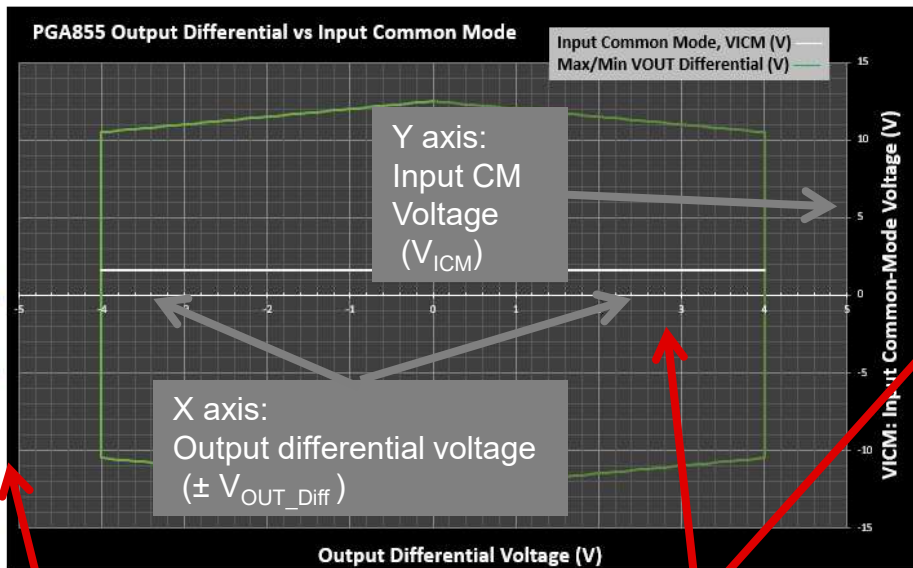
Sheet: "PGA855 Vin CM vs Vout Diff Plot"

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INPUTS: CELLS HIGHLIGHTED IN BLUE

Plot Parameters	
VS+	15.00 in Volts
VS-	-15.00 in Volts
Ensure LVDD+ <= VS+	
LVDD+	5.00 in Volts
Ensure LVSS- >= VS-	
LVSS-	0.00 in Volts
VOCM	2.50 in Volts
Front GAIN	1.000 in V/V



VICM (Scroll Bar)

1.6000

VICM (Scroll)	1.6000	in Volts
VIN Differential Volt (Max)	4.0000	in Volts
VIN Differential Volt (Min)	-4.0000	in Volts
VOUT Differential (Max)	4.0000	in Volts
VOUT Differential (Min)	-4.0000	in Volts

Enter the Input supplies, Output voltage supplies, Gain, and V_{OCM} voltage.

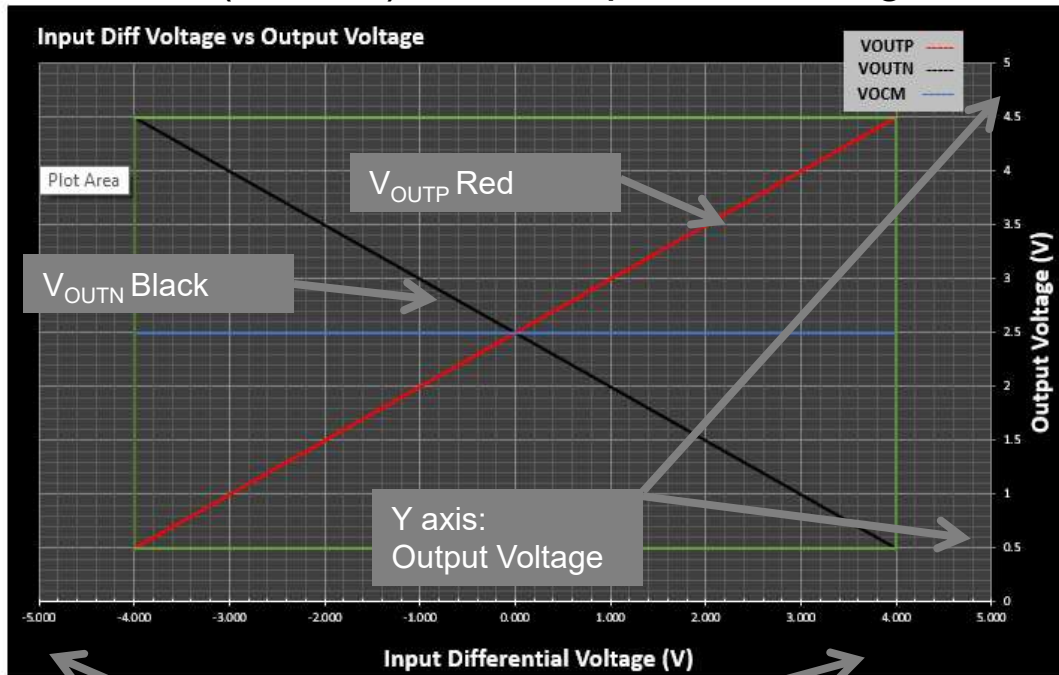
Scroll to the desired input common mode voltage. White line represents V_{ICM} level

Check input / output voltage range



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Second (Bottom) Plot: "Input Diff Voltage vs Output Voltage"



X axis:
Input differential voltage
($\pm V_{\text{Input_Diff}}$)

VIN Differential Volt (Max)	4.0000	in Volts
VIN Differential Volt (Min)	-4.0000	in Volts
VOCM	2.5000	in Volts
VOUTP (Max)	4.5000	in Volts
VOUTP (Min)	0.5000	in Volts
VOUTN (Max)	4.5000	in Volts
VOUTN (Min)	0.5000	in Volts

Check input / output voltage range

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