Electronic Supplmentary Information for: Width Effects on Bilayer Graphene Nanoribbon Polarons

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Figure S1: B4A electonic spectra for $t_{\perp} = 0$ eV (a), an intermediate case when $t_{\perp} < t_{\perp}^{c}$ (b), $t_{\perp} = t_{\perp}^{c}$ (c), and an example when $t_{\perp} > t_{\perp}^{c}$ (d).



Figure S2: B6A electonic spectra for $t_{\perp} = 0$ eV (a), an intermediate case when $t_{\perp} < t_{\perp}^c$ (b), $t_{\perp} = t_{\perp}^c$ (c), and an example when $t_{\perp} > t_{\perp}^c$ (d).



Figure S3: B7A electonic spectra for $t_{\perp} = 0$ eV (a), an intermediate case when $t_{\perp} < t_{\perp}^{c}$ (b), $t_{\perp} = t_{\perp}^{c}$ (c), and an example when $t_{\perp} > t_{\perp}^{c}$ (d).



Figure S4: B9A electonic spectra for $t_{\perp} = 0$ eV (a), an intermediate case when $t_{\perp} < t_{\perp}^{c}$ (b), $t_{\perp} = t_{\perp}^{c}$ (c), and an example when $t_{\perp} > t_{\perp}^{c}$ (d).



Figure S5: B10A electonic spectra for $t_{\perp} = 0$ eV (a), an intermediate case when $t_{\perp} < t_{\perp}^{c}$ (b), $t_{\perp} = t_{\perp}^{c}$ (c), and an example when $t_{\perp} > t_{\perp}^{c}$ (d).

$\Delta \mathrm{HOMA}$



Figure S6: B4A Δ HOMA profile for different interlayer coupling strengths.



Figure S7: B6A Δ HOMA profile for different interlayer coupling strengths.

						$\Delta HOMA$
						0.04
						0.03
						0.02
						0.01
						0.00
						-0.01
						-0.02
						-0.03
0	10	14	18	22	40	0.04
τ_{\perp} (meV)						

Figure S8: B9A Δ HOMA profile for different interlayer coupling strengths.



Figure S9: (a): average of Δ HOMA as a function of t_{\perp} . (b): Shannon entropy of layer A Δ HOMA distribution as a function of t_{\perp} .