Supporting Information for "Critical topological nodal point, nodal line/ring in Kagome graphene"

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Figure S1 (a) Top view and (b) side view of a bilayer AB-stacking Kagome lattice. (c) Band structure of the bilayer AB-stacking Kagome lattice, based on Eqs. (2-3) with $t_1 = 0.8$ eV, $t_2 = 0.7$ eV, $t_3 = 0.1$ eV and the site energy is $\varepsilon_0 = 1.6$ eV.

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Figure S2 (a) Top view and (b) side view of a bilayer Kagome graphene. (c) Band structure of

a bilayer Kagome graphene.



Figure S3 (a) Phonon spectra of the Kagome graphene in Fig. 4(a). (b) Phonon spectra of the 3D Kagome graphene in Fig. 4(d).



Figure S4 Magnetic moments of carbon atoms in strain kagome graphene.