Supporting information for

## Roll-to-roll Continuous Patterning and Transfer of Graphene via Dispersive Adhesion

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Fig. S1. Pressure dependence on the transfer quality of graphene. The pressure values on the arrow mark represent the applied pressure by the patterned roller. Higher pressing pressure of the patterned roller guarantees conformal contacts between the roller and results in the distinct pattern. The scale bars are  $300 \mu m$ .



**Fig. S2.** The ATR-FTIR spectrum of the silicone used as the adhesive layer. The Si-CH<sub>3</sub> group is recognized by a sharp band at about 1260 cm<sup>-1</sup> together with more strong bands in the range 865-789 cm<sup>-1</sup>. Some long or branched siloxane (Si-O-Si) chains are identified by the broad and complex bands in the range of 1110-1010 cm<sup>-1</sup>.



**Fig. S3.** (a) SEM images of residual graphene on the patterning roller. Dark and bright areas represent the graphene residues and bare surface of the patterned mask respectively. The scale bars are 500  $\mu$ m and 200  $\mu$ m respectively. (b) Raman spectra and Raman mapping image of G peaks near the boundary of two areas. Relatively high D peaks imply possible cracks and damages due to high pressure by the roller, which, however, to be removed eventually.