130m at 1× Chinchilla

mars 0.97×
nadamw 0.99×
kron 1.22×
soap 1.27×
muon 1.42×

130m at 8× Chinchilla

mars 1.21×
nadamw 1.18×
kron 1.37×
soap 1.39×
muon 1.37×

520m at 1× Chinchilla

mars 1.08×
nadamw 1.07×
kron 1.20×
soap 1.25×
muon 1.33×

520m at 8× Chinchilla

mars 1.13×
nadamw 1.10×
kron 1.26×
soap 1.29×
muon 1.26×

Reduced Loss Over AdamW