**Remove/uninstall from package.json**

npm uninstall @types/jasmine jasmine-core karma karma-chrome-launcher karma-coverage karma-jasmine karma-jasmine-html-reporter

**Remove karma.conf.js and test.js**

**Remove angular.json**

        "test": {

          "builder": "@angular-devkit/build-angular:karma",

          "options": {

            "main": "src/test.ts",

            "polyfills": "src/polyfills.ts",

            "tsConfig": "tsconfig.spec.json",

            "karmaConfig": "karma.conf.js",

            "inlineStyleLanguage": "scss",

            "assets": [

              "src/favicon.ico",

              "src/assets"

            ],

            "styles": [

              "src/styles.scss"

            ],

            "scripts": []

          }

        }

**Install jest**

npm install -D jest jest-preset-angular @types/jest

**Create file jest.config.js in root**

module.exports = {

  preset: 'jest-preset-angular',

  setupFilesAfterEnv: ['<rootDir>/src/test.ts'],

  globalSetup: 'jest-preset-angular/global-setup',

  testMatch: ['\*\*/+(\*.)+(spec).+(ts)'],

  collectCoverage: true,

  coverageReporters: ["html"],

  collectCoverageFrom: ["./src/\*\*"]

};

**Updated file test.ts under src**

import 'jest-preset-angular/setup-jest';

import './jest-global-mocks'

**Create jest-global-mocks'.ts** **under src**

Object.defineProperty(window, 'CSS', { value: null });

Object.defineProperty(document, 'doctype', {

  value: '<!DOCTYPE html>',

});

Object.defineProperty(window, 'getComputedStyle', {

  value: () => {

    return {

      display: 'none',

      appearance: ['-webkit-appearance'],

    };

  },

});

/\*\*

 \* ISSUE: https://github.com/angular/material2/issues/7101

 \* Workaround for JSDOM missing transform property

 \*/

Object.defineProperty(document.body.style, 'transform', {

  value: () => {

    return {

      enumerable: true,

      configurable: true,

    };

  },

});

**Then go to tsconfig.spec.json**

{

  "extends": "./tsconfig.json",

  "compilerOptions": {

    "outDir": "./out-tsc/spec",

    "module": "CommonJs",

    "types": ["jest"]

  },

  "include": ["src/\*\*/\*.spec.ts", "src/\*\*/\*.d.ts"]

}

**Package.json**

"scripts": {

    "ng": "ng",

    "start": "ng serve",

    "build": "ng build",

    "watch": "ng build --watch --configuration development",

**"test": "jest",**

**"test:coverage": "jest --coverage",**

**"test:watch": "jest --watchAll"**

  }

**Run files**

ng run test

ng run test:coverage

npm run test:watch